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Colony of Fiji

COUNCIL PAPER No. 26.

ANNUAL REPORT  
OF THE  
MEDICAL DEPARTMENT  
FOR THE YEAR  
1954

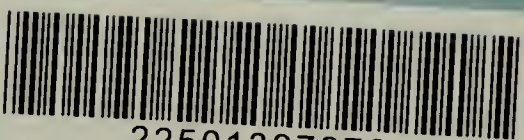


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1955

LEGISLATIVE COUNCIL  
FIJI

COUNCIL PAPER No. 26.

**MEDICAL DEPARTMENT**

(ANNUAL REPORT FOR 1954.)

**ADMINISTRATION**

**ESTABLISHMENT AND STAFF**

**MEDICAL DIRECTORATE**

THE Departmental Establishment is shown at Appendix I to this Report.

Dr. J. M. Cruikshank, C.M.G., O.B.E., Director of Medical Services, Fiji (also Inspector-General, South Pacific Health Service), and Dr. R. W. D. Maxwell, Deputy Director of Medical Services, continued their substantive duties throughout the year.

2. Senior Staff Changes—Appointments, Transfers, etc.:—

Dr. L. G. Poole, Tuberculosis Control Officer, returned from leave on 9th March.

Dr. C. H. Gurd, appointed Physician Specialist on transfer from Nyasaland.

Dr. K. J. Gilchrist, Surgeon Specialist seconded to the Central Medical School for special duties.

Mr. R. I. Cohen, appointed acting Surgeon Specialist.

Dr. K. H. Black, Medical Officer, transferred to Hong Kong.

Dr. H. W. Conran on leave successfully completed studies leading to a Diploma in Psychological Medicine.

Dr. H. E. Knowles on leave for studies in radiology.

Dr. T. A. Doran, Acting Principal, Central Medical School, left the Colony on completion of agreement.

Dr. A. R. Edmonds, appointed Acting Principal, Central Medical School.

Mr. R. B. Fyfe, promoted to Chief Health Inspector.

Mr. A. N. Caldwell, promoted to Health Instructor.

Miss J. Sinclair, Nursing Superintendent, proceeded on pre-retirement leave on 1st January, 1954.

Miss A. E. Storck, Principal Central Nursing School, promoted to Nursing Superintendent.

Miss M. Paton, appointed Principal, Central Nursing School.

**LEGISLATION**

3. Legislation of medical interest enacted was as follows:—

1954 Legal Notice No. 4, making Levuka a Port of Entry.

Ordinance 4, amending provisions as to quorum of a local authority.

Ordinance 5, amending Town Planning Ordinance.

Ordinance 9, amending weights of bread.

Ordinance 15, Essential Services (Arbitration) Ordinance, 1954.

Legal Notice No. 74, amending Public Health (Aerated Water, Ice and Ice Cream) Regulations.

Legal Notice No. 75, amending Public Health (Eating House) Regulations.

Legal Notice No. 77, amending Pharmacy and Poisons Ordinance.

Legal Notice No. 104, Public Health (Hairdressers and Chiropodists) Regulations, 1954.

**FINANCE**

4. Expenditure for year 1954—General District and Special Hospitals:—

	£	s.	d.
Salaries of Medical Officers .. .. .	15,093	3	10
„ Assistant Medical Practitioners .. .. .	12,903	2	6
„ Laboratory Staff .. .. .	6,270	0	0
„ Nursing Staff .. .. .	42,315	8	5
„ X-ray Staff .. .. .	2,670	0	0
„ Clerical Staff . .. .	6,181	0	0
„ Dental Staff . .. .	3,945	0	0
Wages of Subordinate Staff .. .. .	44,964	7	9
Rations and Stores .. .. .	74,129	12	1
Power, Heat, Light, Water and Refrigeration .. .. .	18,780	12	9
X-ray Services .. .. .	1,909	6	2
Laundry . .. .	10,997	15	1
Workshop . .. .	20	1	1
General Maintenance and Incidentals . .. .	1,806	6	8
Hospital paupers burials .. .. .	75	0	0
Drugs, Instruments and Appliances .. .. .	30,309	16	1
Clothing, Bedding and Equipment .. .. .	7,947	6	3
	£280,317	18	8



## 5. Expenditure for the year 1954—Rural Hospitals and Dispensaries:—

	£	s.	d.
Salaries of Medical Officers .. .. .	3,461	0	0
„ Assistant Medical Practitioners .. .. .	33,139	1	8
„ Nursing Staff .. .. .	30,782	12	0
„ Clerical Staff .. .. .	660	0	0
Wages of Subordinate Staff .. .. .	11,763	18	4
Rations and Stores .. .. .	10,919	16	0
General Upkeep and Maintenance .. .. .	769	15	3
Hospitals paupers burials .. .. .	19	19	0
Drugs, Instruments and appliances .. .. .	8,333	15	6
Clothing, Bedding and Equipment .. .. .	1,551	6	1
	£101,401	3	10

## 6. Medical Stores and Equipment: Value of Issues to nearest £:—

	Drugs & Instruments.		Clothing and Bedding.		TOTAL
	Total £	Ave. £	Total £	Ave. £	£
5 General Hospitals ..	22,424	4,485	5,331	1,066	27,755
3 Special Hospitals ..	7,886	2,629	2,617	872	10,503
14 Rural Hospitals ..	4,541	324	1,435	187	5,976
48 Rural Dispensaries ..	3,793	79	116	2	3,909
11 Health Sisters ..	1,567	142	269	24	1,836
108 Assistant Nurses ..	2,336	22	186	2	2,522
4 Religious Missions ..	50	13	....	....	50
Other Medical ..	177	....	151	....	328
*Other Departments ..	856	....	155	....	1,011
Private Accounts ..	154	....	....	....	154
Cash Sales ..	39	....	....	....	39
Totals ..	£43,823	....	£10,260	....	£54,083

\* Includes drugs and replenishment of First Aid boxes at Public Works and Forestry Stations and Education Department schools.

## 7. Revenue and Expenditure of the Department:—

	1952	1953	1954
Gross Expenditure .. .. .	£631,676	£655,575	£683,322
Revenue .. .. .	59,275	76,926	71,043
Nett Expenditure .. .. .	572,401	578,649	612,279
Percentage of Colony's Expenditure	13 per cent	13 per cent	13 per cent
Expenditure per head of population .. .. .	36s. 7d.	38s. 8d.	36. 9d.

The following table shows the expenditure on Medical and Health Services per head of the population, over the past 17 years.

Year	Total Population	Expenditure per head
1936 .. .. .	201,086	8s. 1d.
1939 .. .. .	215,030	10s. 7d.
1942 .. .. .	233,895	10s. 1d.
1944 .. .. .	246,485	12s. 1d.
1945 .. .. .	254,676	14s. 2d.
1946 .. .. .	260,468	16s. 6d.
1947 .. .. .	269,274	20s. 8d.
1948 .. .. .	277,372	24s. 4d.
1949 .. .. .	284,955	25s. 0d.
1950 .. .. .	293,764	27s. 2d.
1951 .. .. .	301,959	32s. 10d.
1952 .. .. .	312,678	36s. 7d.
1953 .. .. .	320,801	38s. 8d.
1954 .. .. .	333,389	36s. 9d.

## COLONIAL DEVELOPMENT AND WELFARE PROJECTS

8. *Suva Medical Centre*—The new Central Medical School building which was opened by Her Majesty the Queen in December, 1953, and those buildings comprising the new Central Nursing School and Hostel were occupied late in 1954. In addition there remain to be constructed the new maternity and out-patients departments. Funds to cover the cost of the expansion of these training and treatment institutions were a free grant of £F240,000 from the United Kingdom Government as part of its Colonial Development and Welfare Scheme. Details concerning the Central Medical School are contained in the Appendix XIV (a).

9. *Tuberculosis Survey*—United Kingdom Colonial Development and Welfare funds were available for the tuberculosis survey during the period 1949 to 1953. Since January 1954 the tuberculosis survey and control measures have been undertaken from Colony funds. Details are contained in Appendix VI.



10. *Central Medical Research Library*—This library was created by a grant of £4,051 from United Kingdom Colonial Development and Welfare Fund. It was taken over by the Fiji Government as a departmental function in 1951. A representative collection of text-books and reference books on medicine, health, research and allied subjects has been acquired. A mimeograph and micro-film projector also form part of the equipment. The library has proved very popular and is in constant use by medical department staff, students and private practitioners.

11. *Filariasis Investigations*—A grant was received in 1953 from the Colonial Development and Welfare Fund to conduct further research concerning the transmission of filariasis and the use of modern insecticides as an additional means of controlling the mosquito vectors. These investigations were commenced in January, 1954 by Mr. C. B. Symes, O.B.E., an officer of Her Majesty's Oversea Research Service.

12. Studies of representative areas of Viti Levu continued during the year and have now been extended to other islands. The essential aim of these preliminary studies is to determine what species of mosquitoes, if any, other than the *Aedes pseudo-scutellaris* Polynesiensis complex, are concerned in the transmission of human filariasis (*W. bancrofti*).

13. Results of micro-filarial examinations of wild mosquitoes caught in bush and in houses, and of laboratory infection of bred mosquitoes confirm the role of the *Aedes pseudo-scutellaris* Polynesiensis group, and indicate also that at least two other species—*Aedes fijiensis* and *Culex fatigans* are seriously concerned. These bite essentially in houses in the late evening and at night and large numbers remain in houses after their feed. This exposes them to possible chemical treatment of houses as a supplement to abolition of breeding grounds, where necessary. Other species have yet to receive adequate investigation. In the course of studies of micro-filariae in the blood of infected people, observations are being made in co-operation with the Physician Specialist on "periodicity" of the micro-filariae and on the effect of Hetrazan on numbers of peripheral micro-filariae. In this respect, our quite inadequate data seem to confirm previous work in the South West Pacific that there is no "periodicity", and that the administration of Hetrazan leaves a considerable proportion of those treated, with low densities of micro-filariae, that may well be sufficient to infect some species of mosquitoes.

#### INTERNATIONAL AGENCIES

14. *Yaws Control*—During the year the Fiji Government entered into an agreement with the World Health Organisation and United Nations Children's Fund whereby assistance would be forthcoming from these two organizations to eradicate yaws as a public health problem. Dr. F. Tross, World Health Organization Yaws Field Officer and Dr. M. J. Whelan, Serologist arrived in November to augment the medical department staff. A plan of operations has been prepared and arrangements have been completed for a pilot serological survey and the mass treatment programme to commence in January, 1955. The supplies of penicillin, additional laboratory and field equipment have already been received. Dr. W. L. I. Verier is medical Officer-in-Charge of the Yaws Control Programme.

15. *Central Medical School*—Agreement has been reached between the Fiji Government and the World Health Organization whereby this organization will provide two lecturers to teach Biology, Biochemistry and Physiology in the Central Medical School. These lecturers are due to arrive in February, 1955. The World Health Organization has also provided funds for additional teaching equipment.

#### DEPARTMENTAL RESEARCH

##### FILARIASIS

16. A report of the filariasis survey which covered the 10 year period from 1944 to 1954 has been completed and is now being edited. It records the findings of investigations of filariasis and micro-filariae in the blood in a representative portion of the Fijian population. Clinical manifestations of filariasis, elephantiasis, lymphatic nodules and history of filarial fever are also included in the report.

17. The data presented in this report concerns 1,049 villages and 51 schools located in 83 districts in the Fiji archipelago. It has entailed the clinical and blood examination of over 70,000 Fijians of all ages and both sexes.

18. As the *Aedes pseudo-scutellaris* which is regarded as the principal vector of filariasis in Fiji, does not usually rest within houses, but shelters in bush in or around villages, the inhabitants are exposed to infection when visiting their gardens or when entering the bush for any other purpose. If bush exists in the village, or is sufficiently near, they may be infected in the village itself. When the filariasis survey was initiated, a programme of bush clearing around the perimeter of villages was instituted, and has been quite well maintained. To ascertain whether this alone has reduced the incidence of micro-filariae, pilot blood re-surveys of the inhabitants in many villages have been conducted, approximately five years after each initial survey. During these intervals a new population up to five years of age has been born, the micro-filariae rate of whom can be compared with that of the corresponding age group at the time of the initial survey.

19. During the past two years controlled experiments in the use of Hetrazan in the treatment and control of filariasis have been undertaken in selected villages. The results of Hetrazan therapy as a control measure are at Appendix XII.

20. The activities of the Fiji Medical Department which have now been recorded in this report induced the Secretary of State to grant Colonial Development and Welfare funds for further fundamental research regarding other possible mosquito vectors and to provide an enquiry into the practicability of using insecticides as a further control measure. These investigations were commenced in 1954 by Mr. C. B. Symes, O.B.E., of Her Majesty's Oversea Research Service.



## DEMOGRAPHY

21. Dr. W. L. I. Verrier is continuing his investigations into the demography of Fijians, and has developed novel methods of indexing persons in a community of mixed races. These methods are now being used in the Tuberculosis and Leprosy Registers, and are being brought into use in other divisions of the Department.

22. Demographic Survey of Rotuma. During the years 1937/51, the Crude Birth Rates for Fijians, Indians, and Rotumans, have been recorded respectively as on the average 36, 41 and 43. It is not known whether the surprisingly high figure for Rotuma reflects the real position, and if it does, what are the factors involved. Accordingly Government invited the Fiji Society to sponsor an investigation in this field, and provided a sum of £100 for expenses. The society asked Dr. Verrier to undertake this research, which is now in progress.

PUBLIC HEALTH  
GENERAL REMARKS

23. The Director of Medical Services is Chairman of the Central Board of Health which controls and co-ordinates public health activities throughout the Colony.

24. There are 22 Local Health Authorities constituted under the Public Health Ordinance (1936) whose duties are concerned with carrying into effect this Ordinance and Regulations made thereunder. The Local Authorities also take charge of the local aspects of Town Planning and Sub-division of lands in their own areas.

25. Each District Medical Officer in the four districts into which the Colony is divided for administrative purposes is a Medical Officer of Health to the Local Authorities within his District; and in this capacity he is assisted by a trained staff of Health Inspectors, Health Sisters, Assistant Health Inspectors, Assistant Nurses, and other junior staff.

26. The Colony is divided into 48 areas each having an Assistant Medical Practitioner at a Rural Hospital or Rural Dispensary. He is responsible to his Medical Officer of Health in matters of communicable diseases. Each of the four Administrative Districts forwards to headquarters a weekly statement of the incidence of notifiable infectious diseases within its boundaries. Guidance is then given when needed by headquarters so that preventive or controlling measures may be as thorough as possible.

27. Fiji as a participating member of the South Pacific Health Service takes part in the monthly telegraphic exchange of epidemiological information among territories concerned.

## COMMUNICABLE DISEASES

28. General tables of the incidence of these diseases are given at Appendix II to this Report.

29. *Influenza*—An extensive outbreak of influenza commenced during the latter part of 1953 and reached its peak about June of 1954. The mortality rate was negligible but the number of cases notified was 8,496, approximately twice the number of cases notified during 1953.

30. *Enteric group of diseases*—The continued reduction of notifications in this group is attributed to perseverance in the anti-typhoid inoculation programme and improvements in rural sanitation. Twelve cases of typhoid and one case of para-typhoid were notified.

31. *Dysentery*—Amoebic dysentery is not included in the above group but remains more or less constant at approximately 25 cases notified each year. These represent cases in which the diagnosis has been confirmed by laboratory findings. The incidence of the other dysenteries is practically the same as for last year.

32. *Infantile diarrhoea*—No explosive outbreak of this condition occurred during the year. 934 cases among Fijians and 419 cases among Indians were reported. The total number notified was 1,527 compared with 2,197 in the previous year.

33. *Pertussis*—The number of cases of pertussis notified was 422 compared with 245 in 1953. Fijians and Indians contributed most of these cases.

34. *Yaws*—This disease was removed from the notifiable list some years ago but during the last quarter of 1953 it was again made notifiable, so that a correlation could be made between the number of cases notified and the records of clinical cases which will be recorded when the yaws mass treatment programme is undertaken in 1955. Cases of active yaws are seldom seen in the built-up areas; however, in the country areas, especially those which are difficult of access the disease is still very prevalent. The initial stage of the yaws control programme will include pilot serological projects to reveal the proportion of active and latent cases of this disease. The mass treatment programme which will commence in 1955 will employ five field teams to cover every village on all the islands. Penicillin in the form of PAM to World Health Organization specification will be used. Yaws is also referred to under the heading International Agencies.

35. *Tuberculosis*—The number of new cases notified during the past three years has remained in the vicinity of 489. A rise in new cases to 667 notified in 1954, is attributed to an improvement in case finding. See also Appendix VI.

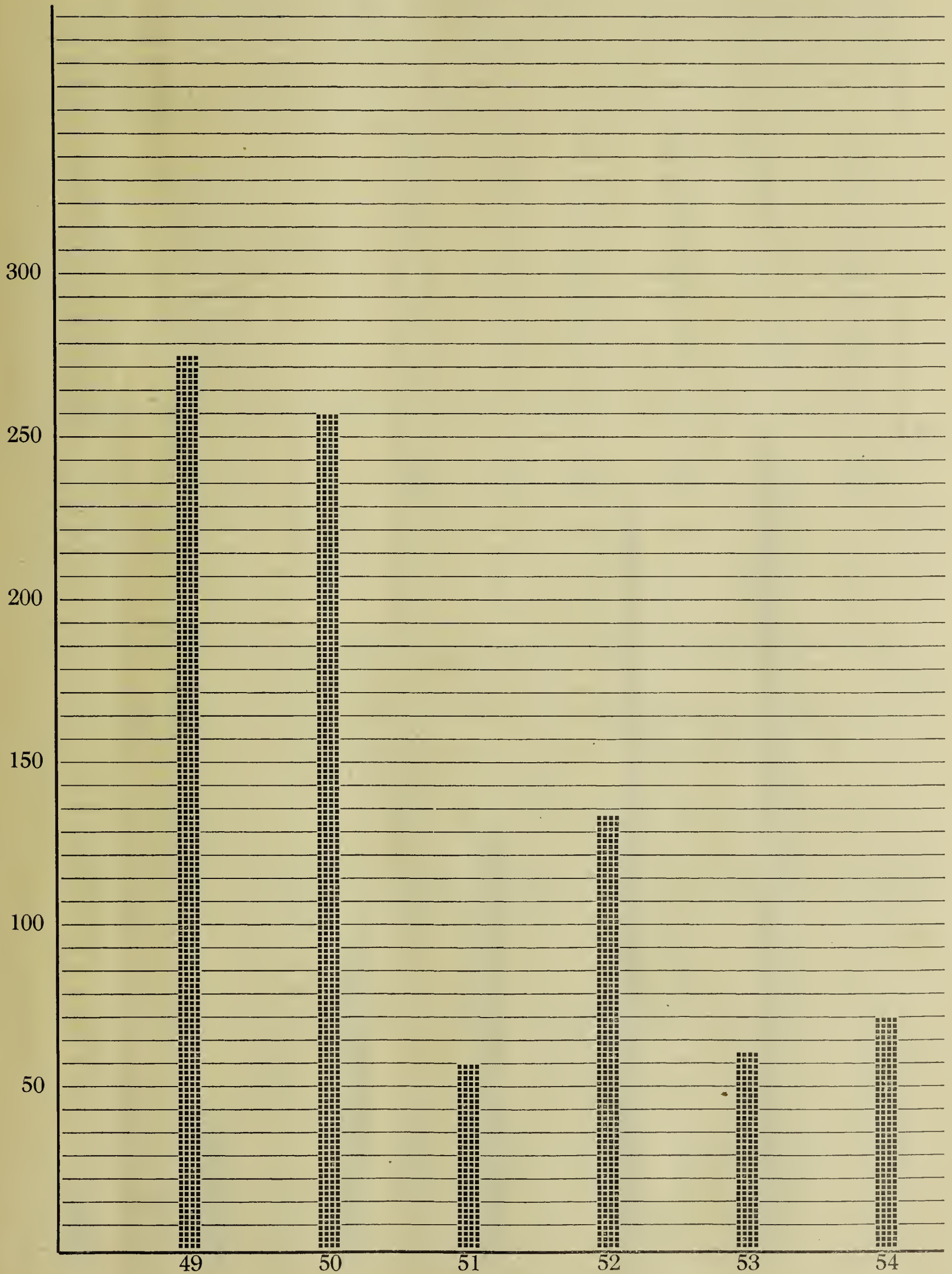
36. *Hookworm*—Although the number of cases notified remains low at 380, the majority of these cases have been confirmed by laboratory examination. The programme of encouraging proper pit-latrines with concrete slabs in rural areas is continuing, but undoubtedly the prevalence of this infection is widespread.

37. *Dengue Fever*—During 1954, 72 cases were notified compared with 60 in 1953. The notifications of this disease have declined generally since 1949 when approximately 250 cases were notified. The *Aedes aegypti* mosquito which is the vector of this disease is found in small numbers in Fijian villages but it is still prevalent in built-up areas.

# DENGUE FEVER

## 1949-1954

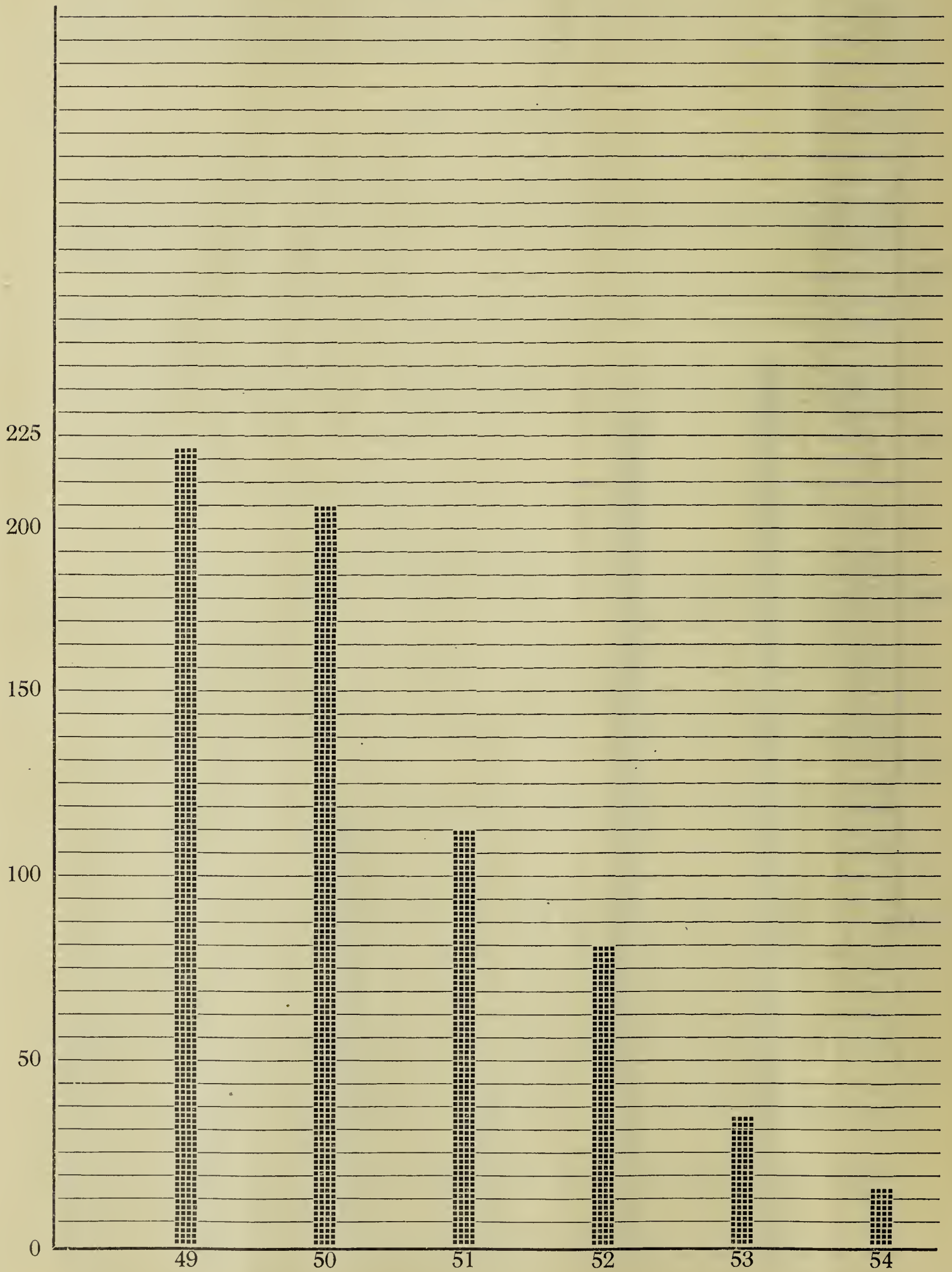
(Cases Notified)





**ENTERIC FEVERS****1949-1954**

(Cases Notified)



38. *Venereal Diseases*—Although venereal diseases do not constitute a major public health problem, 211 cases of gonorrhoea notified during 1954 was approximately the same as for 1952 and 1953. Twelve cases of syphilis were reported as against 23 cases in 1953. More information is contained at Appendix III

39. *Leprosy*—New cases of this disease were 40 in 1953 and 26 in 1954. It is hoped that the decline in the number of new cases of leprosy will continue. Details are contained in Appendix VI.

40. *Tetanus*—The notifications of this disease remain more or less constant between 30 and 50 cases per year. Arrangements have been made to conduct an extensive inoculation campaign in 1955 using combined tetanus, pertussis and diphtheria antigen, with a view to reducing the incidence of both tetanus and whooping cough. Diphtheria does not present a problem, four cases having been reported during 1954. It will be interesting to note whether the administration of diphtheria antigen will reduce the occurrence of ulcers on the lower legs so frequently encountered among children of pre-school age.

41. This table shows the trends in twelve notifiable diseases for the past six years:—

	1949	1950	1951	1952	1953	1954
Dengue .. ..	280	274	58	135	60	72
Dysentery .. ..	655	403	303	267	243	244
Enteric group ..	223	207	111	82	35	13
Gonorrhoea .. ..	260	297	232	208	220	211
Hepatitis Infective	13	32	25	41	29	45
Infantile diarrhoea	798	918	620	750	2,197	1,527
Influenza .. ..	3,566	5,293	3,280	4,478	3,179	8,496
Leprosy .. ..	46	39	49	33	40	26
Pertussis .. ..	350	114	234	773	245	422
Syphilis .. ..	54	27	23	21	23	12
Tetanus .. ..	30	27	31	38	33	45
Tuberculosis ..	448	373	234	453	498	667

42. A division of the intestinal diseases among the indigenous and non-indigenous population is made in the table below:—

	1949	1950	1951	1952	1953	1954
Dysentery—						
Fijians .. ..	453	80	73	81	80	67
Others .. ..	202	323	230	186	163	177
Enteric Group—						
Fijians .. ..	87	100	36	31	20	6
Others .. ..	136	107	75	51	15	7
Infantile Diarrhoea—						
Fijians .. ..	511	680	484	455	1,562	934
Others .. ..	287	238	136	295	635	593

This table indicates:—

- That sanitation among the Fijian villages is improving. This may be attributable to the improvement in health education promoted by the rural Health Sisters and locally trained assistant health nurses in the districts.
- That the anti-typhoid inoculation campaign has given a high degree of protection to all races.
- That there was no widespread or explosive outbreak of infantile diarrhoea during the year. It is still more prevalent among Fijians.

#### VITAL STATISTICS

43. The Registrar-General's statement of the population at the end of 1954 is arranged in Tables in Appendix III.

44. It is estimated that the average annual increase in the population of the Colony during the years 1936/46 was 6,126; while for 1946/53 the figure is 8,632. That the trend is ever upwards is shown by the estimated increase during 1954 of 9,778.

45. The average annual increase for the two major races for the period 1946/54 was estimated at:—

Fijians . . . . .	3,953
Indians . . . . .	5,142

46. The rates of natural increase for the whole population of the Colony were:—

1951 .. .. .	27.22 per mille.
1952 .. .. .	28.17 „
1953 .. .. .	25.98 „
1954 .. .. .	31.48 „

47. Among the crude birth rates may be noted the following:—

	1950	1951	1952	1953	1954
Fijians .. ..	37.11	34.42	36.67	35.18	37.00
Indians .. ..	42.49	42.45	44.69	46.08	43.17
Whole Population .	39.20	37.88	40.02	40.32	39.61

The general death rates were:—

Fijians .. .. .	11.00
Indians .. .. .	8.60

48. The Infant Mortality Rates for the last three years show:—

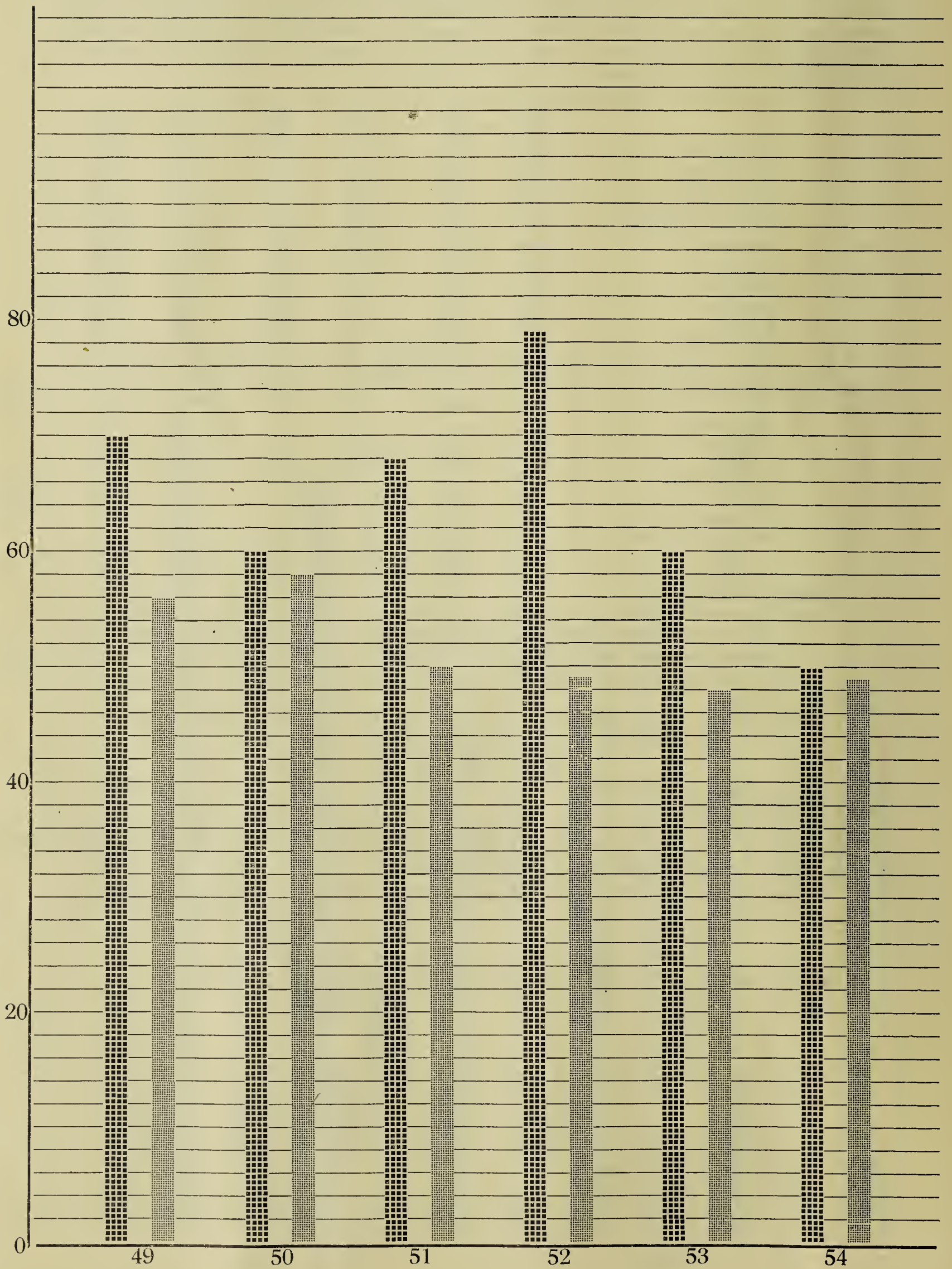
Fijians .. .. .	79, 60, and 50
Indians .. .. .	51, 48, and 49



# INFANT MORTALITY RATES

## 1949-1954

▒ = Fijians.  
▒ = Indians





## HYGIENE AND SANITATION

49. The administration of the Public Health Ordinance of 1936 is vested in the Central Board of Health and by that Board is delegated to 22 Local Health Authorities. Advisory functions are shared between the Director of Medical Services and the Central Board of Health, which body receives reports from, and where necessary directs the activities of, the Local Health Authorities. The minutes of 98 meetings held by Local Authorities were forwarded to the Central Board of Health during 1954.

50. Port Health and Quarantine activities in the capital city of Suva, are in charge of the District Medical Officer, Southern who, as chief Quarantine Officer, is responsible under the Quarantine Ordinance for that work. All Medical Officers in rural areas are Medical Officers of Health to the Local Health Authorities of the sanitary districts in which they are stationed. Ten Health Inspectors with full qualifications, 23 Assistant Health Inspectors (locally trained) carry out duties under the Ordinance, while the Chief Health Inspector, is also Secretary to the Central Board of Health. Public health activities are also carried out by 11 Health Sisters and their staff of locally-trained Assistant Nurses.

51. The Central Board of Health is by statute, the Health Authority for the special area covered by the International Airport at Nadi on Viti Levu.

52. The return of the work done by all Local Health Authorities for each of the years now reported on, includes the following figures.

	1952	1953	1954
General Sanitary Inspections ..	64,031	56,766	42,716
Sanitary defects remedied .. ..	41,243	19,985	23,090
Written notices issued .. ..	3,219	3,957	4,609
Closing Orders issued . . . .	172	324	57
Demolition Orders .. ..	48	118	212
Buildings demolished . . . .	93	184	35
Food premises inspected .. ..	5,566	6,879	1,882
Improvements effected .. ..	230	1,727	461
Foodstuffs condemned in lbs ..	14,367	46,363	27,696
Food samples taken .. ..	357	452	426

53. *Supervision of New Buildings*—The standard of new housing in Township and suburban areas has continued to rise, and some need is now felt for technical (engineering) advice by Local Authorities unable to scrutinize major works now being proposed for erection in their areas. Every new building, where a piped water supply exists, has a septic tank system of sewage-disposal and concrete is in large measure replacing timber frame construction in buildings.

	1952	1953	1954
New applications received .. ..	1,133	1,881	1,151
Declared value . . . .	£631,213	£858,101	£1,797,455

54. Legal Proceedings were as follows:—

(a) For offences under the Public Health Ordinance:—

	1952	1953	1954
Cases taken to Court . . . .	23	61	225
Convictions obtained . . . .	21	59	203
Penalties imposed .. ..	£62	£149	£370

(b) For offences under the Pure Food Ordinance:—

	1952	1953	1954
Cases taken to Court . . . .	22	39	42
Convictions obtained . . . .	19	37	41
Penalties imposed .. ..	£161	£278	£366

55. *Sewage Disposal*—Septic Tanks throughout the Colony are required to be constructed according to approved designs. Reinforced concrete latrine-slabs are manufactured in Suva by the Medical Department and sold at cost-price in all areas.

	1952	1953	1954
Septic Tank proposals passed ..	42	58	51
Latrine-slabs sold .. ..	390	267	452

56. *Garbage Disposal*—There is an organized collection of household and business garbage in 14 sanitary districts. About 6,000 premises are now served by official garbage collections.

57. *Rat Destruction*—

	1952	1953	1954
Number of traps set .. ..	11,988	4,781	12,640
Number of rats caught .. ..	3,640	934	1,875
Rats sent to laboratory .. ..	89	48	78

No rats were found to be infected with plague.

58. *Water Supplies*—These continued to give satisfaction and no cases were reported of disease attributable to water-borne infections.

Number of samples taken—

	1952	1953	1954
Bacteriological test .. ..	152	104	179
Chemical test .. ..	....	55	....
Sea water (public baths) .. ..	45	13	13



## SEAPORT AND AIRPORT HEALTH AND QUARANTINE

59. Suva, Lautoka and Levuka are the three permitted Ports of Entry for overseas ships, with Suva and Lautoka the only permitted Ports of Entry from malarial regions. Aircraft come to the International Airport at Nadi, with that at Nausori for emergency purposes, while flying boats enter at the station of the Royal New Zealand Air Force at Laucala Bay, Suva.

60. During the period under review the following were the numbers concerned:—

	1952	1953	1954
Ships given pratique .. .. .	142	194	206
Landing passengers .. .. .	1,974	1,954	2,385
Aircraft given pratique .. .. .	980	921	1,066
Landing passengers .. .. .	6,655	7,953	10,615
Overseas vessels fumigated .. .. .	16	7	15
Local vessels fumigated .. .. .	75	50	92
Aircraft treated with aerosols .. .. .	379	316	373
International Deratization Certificate	1	3	....

61. The International Airport at Nadi, some 130 miles by road from the capital, handled the bulk of the air traffic. There is stationed there a Medical Officer of Health and Health Inspector with Assistants, who carry out the general sanitary measures of this airport. Strict precautions are taken at Nadi and at Laucala Bay against the accidental introduction of malaria vectors by aircraft.

62. The Medical Department maintains permanent resident caretakers on the Quarantine Islands of Nukulau and Makuluva, some 10 miles from Suva. The Quarantine launch makes weekly visits.

63. *Mosquito and Filariasis Control*—Rigid inspection of surface vessels and aircraft at ports of entry was maintained during the period under review. Normal methods of mosquito control were supplemented by regular residual spraying of buildings at the International Airport at Nadi, with fogging of vacant lands with the T.I.F.A. machine. The larvicide "dieldrin" was experimented with in water-emulsion form and found very effective in the treatment of rice fields outside the airport. All drainage systems were maintained in good order. International airports were kept free from *Aedes aegypti*, Fiji being a yellow fever receptive area.

64. Filariasis Control Inspectors were stationed in all areas of the Colony. Their routine duties include regular visits to villages and schools, giving advice on the eradication of *Aedes scutellaris pseudo-scutellaris*, the main vector of filariasis in Fiji. They give formal lectures, followed by advice on the control measures necessary. Each Inspector is accompanied on his rounds by a Provincial or District Constable who issues formal instructions to the village chiefs to carry out the control measures advised in each case. The district constables, in the more widely separated eastern islands of Lau, have been trained as Filariasis Control Inspectors, so that transport between the islands on tours of inspection has been made unnecessary.

## HOSPITALS AND DISPENSARIES

65. The Colonial War Memorial Hospital which has 275 beds for general purposes is located in Suva. It was pleasant to have as guest surgeons during the year, Professor Milne Walker of Bristol, Professor F. Stock of Hong Kong University and Dr. Mortenson of Melbourne. These surgeons performed intricate surgical procedures from which much valuable experience was derived by the staff.

66. At the Colonial War Memorial Hospital, rotation of Assistant Medical Practitioners has continued whereby immediate graduates will do three months in each department. A similar arrangement has been instituted at Lautoka Hospital and will also be extended to Labasa Hospital next year.

67. A system was introduced during the year whereby a number of the older Assistant Medical Practitioners are brought into the Colonial War Memorial and Lautoka Hospitals for short refresher courses.

68. Details concerning the Colonial War Memorial Hospital, the colony's largest general hospital, 275 beds, and a list of hospitals and dispensaries are recorded in Appendices IV (a) and V.

69. The Mental Hospital of 100 beds is also located in Suva. Details are contained in Appendix VII.

70. The Tuberculosis Hospital of 313 beds, is located on an elevated site of Tamavua, approximately five miles from the centre of Suva. Details are contained at Appendix VI

71. The Fiji Leprosy Hospital which will accommodate approximately 800 patients is located on the island of Makogai about sixty-five miles distant from Suva, but only thirty miles from Natovi on the eastern coast of Viti Levu. Accommodation is also available for patients from Western Samoa, Eastern (American) Samoa, the Cook Islands, Niue, Tonga, the Gilbert and Ellice Islands Colony and New Zealand. A Leprosy Sub-Station is located in Suva where new cases of leprosy are accommodated pending transportation to the Hospital at Makogai. Separate buildings are provided for the reception of cases discharged from Makogai pending return to their homes in Fiji or other South Pacific Islands. See Appendices VIII (a) and (b).

72. The Regulations in Fiji controlling the discharge of patients were relaxed in 1952 to the extent that only one year of surveillance of inactive cases at Makogai is required instead of the two years originally demanded by statute. Discharge is controlled by strict criteria of inactivity. There is a carefully controlled follow-up of discharged patients, and the percentage of readmissions has been low.



## THE NEW ZEALAND AND FIJI LEPERS' TRUST BOARDS

73. The New Zealand Lepers' Trust Board makes funds available annually for the treatment and comfort of leprosy patients in the various South and West Pacific Island Territories. In respect of the patients at Makogai the New Zealand Lepers' Trust Board, makes an annual allocation of funds which are dispensed by the Fiji Lepers' Trust Board which is a statutory body under the chairmanship of Sir Henry Scott, Q.C. The allocations to the Fiji Lepers' Trust Board amounted to NZ. £7,200 in 1951, NZ. £7,100 in 1952, NZ. £4,000 in 1953 and NZ. £5,500 in 1954. Bursaries have been provided to enable medical officers from the various territories to visit Makogai for study purposes. A musical band has been formed recently, the instruments for which were purchased from funds provided by the Lepers' Trust Board. Outside school hours the children indulge in sports including cricket and football; the girls receive training in needlework and handicrafts. Through the courtesy of the welfare officer of the Royal New Zealand Air Force squadron stationed in Fiji, a Boy Scout troop has been formed.

74. The generosity of the Lepers' Trust Board has enabled a fully equipped Technical Institute to be built for training the patients in woodwork and carpentry, and also a Physiotherapeutic Department to provide treatment of nerve lesions with the latest electro-therapeutic equipment as well as with the time-honoured physical methods.

75. His Excellency Sir Ronald Garvey, K.C.M.G., K.C.V.O., M.B.E., in opening the Institute, named it the Ernest Wolfgram Technical Institute in memory of the man (himself a leprosy patient) who did so much for the communal life of the patients—until his death on the Island in 1948.

76. The governments of Fiji and New Zealand contribute annually to a building and replacement fund. The former electrical power supply has already been replaced by larger generators, and the present water supply is now being improved. With the assistance of a grant from United Kingdom Colonial Development and Welfare Fund, new quarters, including kitchen, for 100 Indian patients were completed during the year. A new school for the children of labourers engaged in growing foodstuffs and in other activities for the hospital, residential quarters for Assistant Medical Practitioners who receive training at Makogai as part of the Medical curriculum of the Central Medical School are now scheduled for construction during 1955.

77. The Indian Reform League in Fiji contributed a considerable sum of money towards a recreation room for the Indian patients at Makogai—this building will be formally opened in 1955.

78. The loyalty, enthusiasm and devoted service of the Sisters at Dalice and the lay staff at Nasau make possible the satisfactory operation of this institution.

79. Visitors to Makogai during 1954 included:—

His Excellency Sir Ronald Garvey, Governor of Fiji.

Sir Willoughby and Lady Norrie, Governor-General of New Zealand.

Sir Henry Scott, Q.C., Chairman, Fiji Lepers' Trust Board.

Dr. J. M. Cruikshank, Director of Medical Services.

Mr. W. E. Donovan, Secretary, Fiji Lepers' Trust Board.

Professor R. Milne Walker, England.

Dr. F. Airey, England.

Lieut. Commander B. L. Twomey with officers and other ranks of the Royal New Zealand Navy Frigate, *Kiwi*.

80. A report in detail of the Central Leprosy Hospital at Makogai and the Leprosy Sub-Station at Korovou, Suva is contained in Appendices VIII (a) and (b).

## DISTRICT HOSPITALS AND DISPENSARIES

81. Three district hospitals are located at Lautoka, Labasa and Levuka. There are also four privately owned hospitals ranging in bed capacity from four to forty-one beds subsidized by government. Fourteen rural hospitals are staffed by Assistant Medical Practitioners and locally trained nurses. These hospitals are supervised by visits from the medical officers located in the respective districts. Three dispensaries are located in the Suva area, and forty-four rural dispensaries are located at strategic centres in the various islands. These dispensaries are under the charge of Assistant Medical Practitioners and locally trained nurses.

82. In accordance with present policy a number of thatched dispensaries are being replaced each year by buildings of timber construction. Most dispensaries consist of one room 12 feet by 12 feet, but a few in remote areas have an additional room of the same dimensions where patients may be kept for observation, or pending transfer to hospitals. These buildings which consist of panels 8 feet by 3 feet complete with windows and doors are prefabricated by the Medical Department and along with furnishings and cement are transported to the site by lorry portorage or medical vessel. There they are erected on a concrete dwarf wall with concrete floor prepared at the site.

83. In addition to replacements, a new dispensary was erected at Tukavesi on the island of Vanua Levu.

84. One Health Sister is fully occupied on school health duties in the Suva area and eleven Health Sisters are located at strategic centres conducting ante-natal clinics, school inspections, child welfare work and supervising the locally trained nurses engaged in child welfare and maternity services in the rural areas.

85. For a population of approximately 330,000 there are available a total of 1,414 hospital beds, exclusive of the 750 beds at the Leprosy Hospital. A list of hospitals, their bed capacity and the location of dispensaries is at Appendix IV (a).



## NUTRITION

86. Miss Susan Holmes, the Senior Nutritionist, South Pacific Health Service directed the activities carried out by the Dietitians employed at the Medical Department institutions and assumed the responsibility of providing lectures in this subject for medical and nursing students. Nutrition activities in Fiji are contained in Appendix XII.

## EYE CONDITIONS

87. Such information as is available concerning eye conditions in Fiji has been reviewed in anticipation of the arrival in 1955 of an ophthalmologist to augment the medical establishment.

88. On the occasion in 1950, of a visiting ophthalmologist from Australia, record was kept of 352 patients who were seen in Suva and Lautoka during a period of nine weeks. Of these 77 per cent were simple refractions; 4 per cent were squints; 5 per cent pterygia; 1 per cent glaucoma; a group of 3 per cent including cases of iritis, two optic atrophies (one Leber's disease) one retinoblastoma, one conjunctival melanoma, one cavernous sinus thrombosis, and two cases of Eale's disease. A final group of 6 per cent of cases seen privately had bilateral cataracts sufficiently advanced to reduce vision to less than 6/60.

89. Of the sight reducing conditions, cataract is considered the commonest cause, being more prevalent among the Indians than Fijians. This may not be due to any racial predisposition but to the fact that the number of Indians attending eye clinics predominates.

90. Various corneal conditions appear to be the next most common cause of reduced vision. The exact nature of these has not always been definitely established. Some have associated lid conditions and pannus, suggesting that they may be old trachoma cases. There is a fairly common type of granular conjunctivitis without any corneal involvement which responds well to treatment and needs to be carefully differentiated from new cases of possible trachoma.

91. During the regular yearly visit of a leading ophthalmologist from Australia during the past years, systematic lectures have been given to medical students, and practical demonstrations to an Assistant Medical Practitioner who is already skilled in operative work, and who has also undergone special training in the Dunedin (New Zealand) Eye Hospital.

92. Records of general health are kept concerning the various villages, and blindness cards are in use by the Assistant Medical Practitioners for the supply of information to the Central Register of the Blind, which is kept in Suva. As the records become more complete, additional information will be available regarding eye conditions in the Colony. This will enable future preventive measures to be applied in a more precise manner.

93. With the appointment of an ophthalmologist in 1955, lectures in ophthalmology to students at the Central Medical School will be placed on a firm basis, and the sketchy information concerning eye conditions in the Colony will be thoroughly investigated. Whether true trachoma exists in Fiji has been controversial for many years, and it has been stated that inclusion bodies typical of trachoma have been found in normal eyes. It is hoped that the present indefinite status of trachoma will soon be clarified, and up-to-date information regarding the incidence of blindness in Fiji will be forthcoming.

94. From figures so far available, it appears that blindness to such a degree as to disable any significant proportion of the wage-earning population, or to make them dependent on public assistance, is not high. The following information is taken from the 1946 census report:—

			1911	1921	1936	1946
	Race		Blind	Blind	Blind	Nearly Blind
	per cent		per cent	per cent	per cent	per cent
Fijian	.. ..	1.51	1.29	0.99	0.45	0.67
Indian	.. ..	0.12	0.15	0.26	0.11	0.23
Total population	.	0.99	0.79	0.63	0.27	0.43

95. In actual numbers—in 1946, out of a total Colony population of 259,638, 704 persons were shown to be blind, and a further 1,116 were shown to be “nearly blind”. Of this grand total of 1,820 persons with gross visual defect it is stated that “almost without exception this number referred to persons of 40 years of age and over”, and it may therefore be reasonably assumed that a large number were persons who by reason of advanced age alone had passed out of the wage earning group. Again, a large number (728) were shown to be women, few if any of whom would be likely to have been ever engaged in other than domestic and housewifery duties. Finally the figures for blindness and near blindness have shown a steady downward trend over the successive years for which figures are available and if, as it likely, this trend has been maintained, or at least not reversed, it would appear that the present problem of economic rehabilitation of the blind or near blind in this Colony—as apart from the question of treatment of remediable visual defects—is likely to involve a good deal less than 1,000 persons.

96. The Central Register of the Blind which was inaugurated in 1950, reveals a total of only 57 cases of blindness having been reported on the blindness cards which were devised. It is felt that the register cannot therefore be regarded as complete or representative despite instructions which have been issued to Assistant Medical Practitioners. With the appointment of an ophthalmologist, the interest in blindness will be stimulated and a marked improvement in the accuracy of the Central Register is anticipated.

97. The numbers of attendances at the Eye Department of the Colonial War Memorial Hospital during 1954 was as follows:—

Fijian	Indian	Others	Total
921	1,093	393	2,407



## DENTAL DIVISION

## DENTAL CLINIC—COLONIAL WAR MEMORIAL HOSPITAL.

98. *Staff*—

D. M. Ellerton, B.D.S. .. .. .	Senior Dental Officer
Ratu I. L. Vosailagi, B.D.S. .. .. .	Dental Officer.
Mrs. A. Beddows . . . . .	Clinic Sister.
Mangal Singh .. .. .	Clerk Receptionist
Mavoa .. .. .	Clinic Nurse.

99. Dental treatment was given to the general public, in-patients and school children throughout the year by 3rd and 4th year students of the Dental School under the Supervision of the graduate dental officers.

100. The clinic operated in two sections. Patients attending for the first time were examined and given necessary immediate treatment in the examination Clinic consisting of three chairs. Patients for conservative treatment attended by appointment in the School Clinic consisting of five chairs. The remaining chair was set aside for the Senior year as a demonstration chair.

101. *Treatments*—

## Operative Dentistry—

Amalgam 1 Surface ..	1,069
Amalgam 2 Surface ..	462
Amalgam over 2 Surface	165
Silicate Cement .. ..	262
Base Intermediate ..	734
Zinc Oxide Temporary ..	448

## Anaesthesia—

Local .. .. .	3,921
General .. .. .	216

## Exodontia—

Extractions .. .. .	4,603
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## Radiodontia—

Intra Oral Film .. ..	171
Intra Oral Film-Bitewing	73

## Patients—

European Adults . . . .	433
Indian Adults .. .. .	1,577
Fijian Adults .. .. .	1,526
Others .. .. .	448

Total Patients for the year .. .. .

## Revenue—

Cash received in Dental Clinic . . . . .	£1,672 18 5
Fees through Hospital Office Account . . . . .	356 6 0

Total .. .. . £2,029 4 5

## Oral Surgery—

Alveolectomy .. .. .	24
Impaction .. .. .	37
Surgical Removal .. .. .	60
Fractures .. .. .	23

## Dentures—

Full Upper . . . . .	105
Full Lower . . . . .	88
Partial Upper .. .. .	104
Partial Lower .. .. .	40
Rebasing Upper . . . .	12
Rebasing Lower . . . .	10
Repairs .. .. .	47

European Children . . . .	645
Indian Children .. .. .	2,149
Fijian Children .. .. .	1,512
Others .. .. .	442

Total .. .. . 8,732

102. *Development*—Plans were finalized for the conversion of a former Central Medical School building to a new Dental Clinic. This project has been given an early priority for 1955. Dental chairs and units together with other equipment were purchased and stored in readiness.

103. *Touring Dental Service*—

Staff Ratu I. L. Vosailagi (until August)  
A. D. P. N. Waqanaceva  
A. D. P. J. Ravunakava.

Dental tours, usually of about twenty-eight days, were made to hospitals and schools throughout the islands as follows:—

	Examinations	Extractions	Fillings	Scalings
Lau Group .. .. .	68	103	..	..
Nasinu Training College . . . . .	84	18	86	6
Yasawas .. .. .	195	98	..	..
Vatulele .. .. .	24	35	5	..
Labasa Hospital . . . . .	177	72	43	..
Waiyevo Hospital and Schools . . . . .	730	48	16	..
Ratu Kadavulevu School .. .. .	130	20	140	4
Nabouwalu Rural Hospital and Schools	445	156	145	10
Queen Victoria School .. .. .	150	5	89	7
Lautoka Hospital and Schools.. .. .	426	312	205	23
Vatukoula Government School . . . . .	621	161	210	13
Navua Schools .. .. .	322	291	47	4
Levuka Hospital and Schools .. .. .	209	165	127	3
Makogai Hospital and Schools.. .. .	238	95	68	20
Total .. .. .	3,819	1,579	1,181	92

104. All revenue received was paid in at the respective hospitals. During holiday periods and between tours the travelling officers were engaged in the Colonial War Memorial Hospital Clinic.

105. *Tamavua Tuberculosis Hospital Dental Clinic*—Treatment to “up” patients was given by senior students attending by roster each day of the academic year except when lectures prevented their attendance.

Extractions .. .. .	178
Examinations . . . . .	286
Scaling .. .. .	50
Fillings.. .. .	243



## DEPARTMENT VESSELS

106. The Medical Department maintains several vessels. The auxiliary ketch *Makogai* of 26 tons is based on the island of Makogai, and is used solely for the carriage of staff, visitors and stores between Suva and the leprosy hospital at Makogai, a distance of 65 miles with occasional trips to Levuka and Natovi. The vessels was fully employed on these duties throughout the year.

107. In Suva the Health Department operates the motor launch *Vuniwai-ni-toba*. This launch combines quarantine with fumigation duties and maintains the weekly link between Suva and the quarantine islands of Makuluva and Nukulau.

108. At Wainibokasi there is a small motor launch the *Adi Makareta*, which is used principally by the Health Sister, Nausori, for inspection of native villages in the Rewa delta and the Tailevu coast.

109. The 42 ton auxiliary ketch *Vuniwai* was busily employed for eleven months of 1954. Inspection tours were undertaken by the Director and Deputy Director of Medical Services, Medical Officers, the Senior Dental Officer, Assistant Dental Practitioner, Nursing Superintendent and Health Sisters. Many islands and medical stations were visited. When convenient the vessel was utilized to transfer Medical and Nursing Staff within the group and to Suva when proceeding on leave. The vessel was also able to implement the Department's programme for the replacement of native type dispensaries, by carrying prefabricated wooden dispensaries, as well as carpenters to erect them, to several distant parts of the Group. His Excellency the Governor utilized the *Vuniwai* for a tour of the Yasawa Group in June and later in the year visited Kadavu. In February, she was placed at the disposal of Ratu Sir Lala Sukuna, K.C.M.G., K.B.E., who in company with Father Ganey, made an inspection tour of Co-operative Society and Credit Union Branches in the Natewa Bay district. By means of the vessel Health Sisters at Labasa, Lautoka and Savu Savu are able to make twice yearly visits of child welfare inspection in their districts.

110. It was unfortunate that on the night of 4th December whilst on a voyage from Savu Savu to Suva, the vessel was stranded on the main reef at Wakaya. She was refloated the next day and was able to proceed to Suva, but was damaged to such an extent that she was out of action for about six weeks.

111. Below are the names of the islands and places, visited by the a.k. *Vuniwai* during the year 1954:—

*Northern District* (Vanua Levu), Udu, Visoqo, Labasa, Naduri, Dreketi, Nabouwalu, Savu Savu, Tukavesi, Buca Bay, Korotasere, Vuinadi, Saqani, Vatuvou, Nivaka, Baulailai.

*Cakaudrove District*—Taveuni, Rabe, Nabuka, Natewa, Wailevu, Yacata, Laucala, Qele Levu Lagoon, Tawake, Devo, Kioa.

*Eastern District*—Levuka, Moturiki, Gau, Makogai, Koro, Nairai.

*Lau District*—Moala, Matuku, Kabara, Totoya, Fulaga, Lakeba, Cicia, Vanuavatu, Lomaloma, Katafaga, Munia, Moce, Ogea, Namuka, Oneata.

*Southern District*—All Kadavu ports, Beqa.

*Western District*—All the main islands in the Yasawa and Mamanuca Groups including Vatulele.

## LABORATORY DIVISION

112. The year 1954 has been chiefly marked by staff changes. Mr. J. E. Pery-Johnston, who had held the post of Laboratory Superintendent for many years left the Laboratory in February on extended leave and resigned later in the year. This essential and key post had not been filled by the end of the year. Lenitasi Kuruduadua retired from the Laboratory in April after many years service, and Assistant Medical Practitioner Samuela Baravilala was admitted to hospital in October; this was a serious loss to the Laboratory, but it is hoped that he will be able to return to duty in 1955.

113. P. Pillay having successfully completed the three years course, was appointed Laboratory Assistant in April. Six students from Fiji were enrolled for training during the year. One student from the Cook Islands is also doing the full course.

114. The shortage of staff was still further accentuated at the end of the year by the necessity of seconding staff to work full time with the Serologist appointed to work in the Laboratory by the World Health Organization for the Yaws Campaign. Students in turn, are seconded to this work for additional training.

115. With the appointment of more specialist staff in the Medical Department it is inevitable that demands on the service which the Laboratory was designed to provide will increase, together with further demands from the Health Authorities with increasing consciousness of the importance of investigations into the cleanliness and purity of food and water supplies. This has happened, and in spite of staff difficulties the work of the Laboratory increased very considerably during the year.

116. *Teaching*—In accordance with the terms of the appointment of the Pathologist a considerable amount of time is, and should be, given to lecturing in the Central Medical School. This has been continued during the year, the subjects covered being General Pathology, Clinical Pathology, Forensic Medicine and Histology. Many specimens have been collected and mounted in perspex jars and classified to form the nucleus of a teaching museum during the year. Formal lectures in Physiology and Histology have been given to the Laboratory Students.

117. *Forensic Medicine*—A considerable amount of time is taken up in performing post mortems for the Police and subsequent attendance at Court in criminal cases, which have been rather numerous during the past year. The total number of autopsies carried out during the year was 133, of which 39 were for the Police. These included two cases of homicide, six of suicide, nine accidental drowning, 2 electrocution and six from traffic accidents.



118. *Blood Films for Parasites*—Sixty-eight stained films were examined for malaria. Parasites were found in 16. These were all *Plasmodium vivax* and imported cases, mostly in members of the Fiji Forces returned from Malaya. The importation of these cases, most of whom were carrying gametocytes (infective forms) into a malaria free country shows the necessity for vigilance in controlling the possible importation of mosquito vectors. Films examined for microfilariae numbered 337, of which 27 were positive. These films were mainly from members of the Fiji Military Forces during routine pre-embarkation examinations.

119. Details of the specimens examined at the Central Laboratory, Suva (33,439) and in the Branch Laboratory at Lautoka (14,832) are shown in Appendix IX.

## TRAINING

### CENTRAL MEDICAL (AND DENTAL) SCHOOL

120. The Advisory Board consists of the Director of Medical Services, Fiji (who is also Inspector-General, South Pacific Health Service), Chairman; the Director of Education, Fiji; the Secretary for Fijian Affairs; the Deputy Director of Medical Services, Fiji; the Medical Officer-in-Charge of the Colonial War Memorial Hospital, and the Principal of the School. The Chief Secretary, Western Pacific High Commission, is also a member of the Board, but due to the transfer in December, 1952, of the headquarters of the Western Pacific High Commission to Honiara in the British Solomon Islands Protectorate, this officer's functions as a member of the Board have been delegated by that Administration to the Inspector-General. Dr. E. W. Udick, a dental officer on loan from the United States Trust Territory of the Pacific, represented the High Commissioner of that administration on the Advisory Board during 1954.

121. The Academic Board consisting of the Principal (Chairman), the Medical Officer-in-Charge of the Colonial War Memorial Hospital, the Physician Specialist, the Surgeon Specialist, the Medical Officer of Health and the Senior Dental Officer meets quarterly to keep the curriculum constantly under review and to assess the progress of the students.

122. Assistant Medical Practitioner is the designation given to a graduate in medicine from the Central Medical School. Dental graduates are Assistant Dental Practitioners. In the South Pacific Health Service territories these graduates do not engage in private practice but are full time members of the medical staffs of the participating territories.

Until 1949 the average total intake from all territories was 40 students. To supply replacements due to retirements and illness, and to staff additional dispensaries to serve an increasing population and to enable Assistant Medical Practitioners to receive post-graduate training in special fields of medicine, the enrolment was doubled in 1950 and again doubled in 1951. This together with the enrolment in 1951 of 37 medical and 29 dental students transferred from the United States Medical School in Guam placed a considerable strain on teaching and accommodation facilities, until the new Central Medical School building was occupied in 1954.

123. The additional burden on the school was greatly alleviated by the High Commissioner of the United States Trust Territory of the Pacific seconding Dr. H. L. Cloud, Dental Educator to the school during 1951 and 1952. Dr. Cloud was relieved in 1953 by Dr. Earl W. Udick and Mrs. Udick, both fully qualified dentists. Dr. Udick also served as Liaison Officer between the School and the United States Trust Territory. This valuable assistance has been greatly appreciated and through their efforts a sound training in dentistry was ensured, as Mr. D. M. Ellerton was not appointed to the vacant post of Senior Dental Officer until June, 1953. Mrs. Udick returned to the United States during the year and Dr. Udick completed his two years secondment in December, 1954.

124. The new school building is of reinforced concrete, three stories in the front and two stories in each wing. It contains offices, lecture rooms, laboratories, library, common room, dining room recreation room, a modernly equipped kitchen and sleeping accommodation for approximately 150 students.

125. To take advantage of the higher standard of secondary education available in some of the territories and to provide more training in basic science, anatomy, physiology and clinical subjects a five year medical course was inaugurated in 1951 concurrently with the four year medical course. The students at present enrolled in the four year course will have progressed sufficiently to be absorbed into the five year course, and commencing in 1955 only a five year medical course will be provided. Through the co-operation of the Department of Education, a special course in Secondary School subjects extending over a period of one or two years as required will also commence in 1955, to prepare students for entry to the five year medical course, who are enrolled from territories where facilities for secondary education are still in the process of development. The course in secondary school subjects will be given at the Central Medical School. (This arrangement has been endorsed by the World Health Organization Adviser in Education and Training who visited Fiji early in 1954).

126. The Colonial War Memorial (general) Hospital (275 beds), the Tamavua Tuberculosis Hospital (313 beds), the Mental Hospital (100 beds) and the Central Leprosy Hospital, Makogai approximately 650 patients, provide amply clinical material for the students and full use is made of the Colony's health divisions, namely, Tuberculosis, Leprosy, Yaws, Mosquito and Filariasis Control, Sanitary Engineering, School and Welfare Clinics, Nutrition and Quarantine services for training in preventive medicine, environmental hygiene and epidemiology.

127. Medical Auxiliary subjects—Apart from medical and dental training, complete courses leading to a local certificate in the following technical subjects are available in conjunction with the Central Medical School and Fiji Medical and Health Departments:—

Pharmacy . . . . .	three years
Laboratory Assistant . . . . .	three years
Clinical Laboratory Assistant . . . . .	one year
Assistant Health (Sanitary) Inspector . . . . .	three years
Filariasis and Mosquito Inspector . . . . .	six months.



128. The Assistant Sanitary Inspectors course includes training in Malaria and filariasis control and the application of insecticides. Students from territories other than Fiji may complete the third year in the health department of their home territory.

129. The following table shows the increase in the enrolment of students during the past six years and the courses they pursued.

Course	1949	1950	1951	1952	1953	1954
Medical .. .. .	42	76	124	129	123	100
Dental .. .. .	1	2	23	30	23	33
Pharmacy .. .. .	2	5	5	9	6	7
Sanitation .. .. .	6	14	10	20	13	19
Laboratory ... ..	3	5	6	12	8	6
*Filariasis and Mosquito Control	13	16	14	21	9	8
X-ray .. .. .	0	0	1	1	3	3
Total .. .. .	67	118	183	222	185	176

\* All sanitation students now take this course although it may be taken independently if so requested by a territory. See Appendix XIV (a) for further details.

130. Post-Graduate Courses—Special courses are available in tuberculosis (diagnosis, clinical, laboratory, X-ray, treatment, Mantoux testing and B.C.G. vaccination); leprosy (diagnosis, treatment, registration and follow-up); eye diseases; ante-natal and infant welfare work; obstetrics; school health; nutrition; port quarantine duties; filariasis and mosquito control. Periodically Assistant Medical Practitioners are now returned to the school and hospitals for refresher courses in general and special subjects.

131. Outstanding Assistant Medical Practitioners contingent upon Medical Department requirements are selected for further training overseas if this cannot be provided at the Suva Medical Centre. These facilities have been made possible through the kind co-operation of Sir Charles Hercus, D.S.O., O.B.E., Dean of the Medical Faculty, University of Otago and Professor E. Ford, Dean of the Medical Faculty, Sydney University. The Metropolitan Health Departments of Auckland, New Zealand and Sydney, Australia occasionally allow Assistant Medical Practitioners during overseas leave to observe the functioning of their respective departments.

132. The students continue to excel in sport particularly football. Additional playing fields are provided at the new buildings. The quarantine islands adjacent to the harbour of Suva are available for outings during the term and long vacations.

133. In 1953 some of the medical schools in England agreed to recognise the facilities available at the Colonial War Memorial Hospital, as meeting the requirements for the compulsory year of hospital training prior to medical registration. The Medical Council of New Zealand is also considering the granting of similar recognition. This may lead to applications being received for appointments as resident housemen from students in the United Kingdom and New Zealand, and in particular from medical students from Fiji who are attending medical schools abroad.

#### CENTRAL NURSING SCHOOL AND HOSTEL

134. The construction of a group of new buildings for the accommodation and training of local girls in nursing was provided for in the United Kingdom Colonial Development and Welfare Grant for the Suva Medical Centre. Some of these buildings were brought into use during 1954 but the remainder will not be ready for occupancy until early in 1955. Class-rooms, accommodation and ancillary services for approximately 200 nurses are provided.

135. *New Zealand Registration Standard*—Through the Director of the Division of Nursing, New Zealand and with the approval of the New Zealand Nurses' and Midwives' Board arrangements have been completed for a course of training to New Zealand registration standard being provided in Fiji. It is expected that the first class will be enrolled in January 1955. Candidates for admission to this course will need to possess the educational standard required by New Zealand Nursing Schools. Until sufficient numbers of candidates with the higher educational standard are offering, girls of lower educational level will continue to be accepted for training to the present local Fiji registration standard.

136. *Registration of Nurses and Midwives*—The Nurses' and Midwives' Board consists of the Director of Medical Services as Chairman, the Nursing Superintendent and the Principal, of the Central Nursing School as *ex officio* members and three members appointed by the Governor in Council. Although provision has been made for the representation of nurses in private practice, there are at present none engaged in private nursing who are not in some way subsidized by Government. Regulations under the Nurses and Midwives Ordinance (1948) came into force in 1952.

137. *Nursing Staff*—The majority of the State registered nursing staff at the hospitals, and the rural Health Sisters are obtained by secondment from the Department of Health, New Zealand on agreements of one or two years duration. Some of these nurses, extend their agreement and a few return for a second tour. A shortage of tutor sisters has been experienced throughout the year. The staff of locally trained nurses was maintained at a satisfactory level.

138. Additional information regarding the training of nurses and work at school and welfare clinics is contained in Appendix XV.

#### METEOROLOGY

139. Summaries of Meteorological observations for 1954 are given at Appendix XX. For these I am indebted to the Meteorological Officer at Laucala Bay, Suva.

J. M. CRUIKSHANK,  
Director of Medical Services.



## APPENDIX 1

## DEPARTMENTAL ESTABLISHMENT

	1954	31/12/54
1. MEDICAL AND ADMINISTRATIVE SECTION—		
Director of Medical Services .. .. .	1	
Deputy Director of Medical Services .. .. .	1	
Assistant Director (Health and Medical) .. .. .	1	(1 vacant)
Secretary .. .. .	1	
Senior Medical Officers .. .. .	3	(1 vacant)
Physician Specialist .. .. .	1	
Surgeon Specialist .. .. .	1	
Medical Officers .. .. .	18	(4 vacant)
Ophthalmologist .. .. .	1	(vacant)
Radiologist .. .. .	1	(vacant)
Dental Surgeons .. .. .	2	
Pathologist .. .. .	1	
Assistant Medical Practitioners .. .. .	98	
Assistant Dental Practitioners .. .. .	2	
2. NURSING SECTION—		
Nursing Superintendent .. .. .	1	
Matrons and Assistant Matrons .. .. .	5	(2 vacant)
Nursing Sisters .. .. .	49	(7 vacant)
Health Sisters .. .. .	11	
Principal (1) Tutors (6) Nursing School .. .. .	7	(3 vacant)
Nurses .. .. .	342	(28 vacant)
3. TECHNICAL SECTION—		
Laboratory Superintendent .. .. .	1	(vacant)
Laboratory Assistants .. .. .	8	(1 vacant)
Chief Health Inspector .. .. .	1	
Health Instructor .. .. .	1	
Health Inspectors (10) Assistant Inspectors (23) .. .. .	33	(3 vacant)
Government Pharmacists (3) Assistants (4) .. .. .	7	(2 vacant)
Radiographers (2) X-ray Assistants (2) .. .. .	4	
Dietitians .. .. .	3	
Dental Mechanic .. .. .	1	
4. CLERICAL SECTION—		
Clerical Staff .. .. .	35	
5. SUPERVISORY SECTION—		
Mental Hospital, Attendants (2) Orderlies (19) .. .. .	21	
Caretaker, Quarantine Island .. .. .	1	
Carpenters (3) Engineers (3) Storekeepers (2) .. .. .	8	
Occupational Instructor .. .. .	1	
Housekeepers (3) Laundry (2) Seamstress (1) .. .. .	6	
Subordinate Staff .. .. .	112	
6. CENTRAL MEDICAL SCHOOL—		
Principal (1) Assistant Principal (1) .. .. .	2	(1 vacant)
Dental Officer (1) Dental Mechanic (1) .. .. .	2	
Science Lecturer .. .. .	1	
Housekeeper (1) Clerical staff (1) Servants (6) .. .. .	8	
7. FIJI LEPROSY HOSPITAL—		
Medical Officer .. .. .	1	(Acting)
Clerical Staff .. .. .	2	
Overseer (1) School teachers (2) Constables (4) .. .. .	7	
Bakers (4), Labourers and Servants (30) .. .. .	34	
Nursing Sisters .. .. .	23	
8. MALARIA PREVENTION AND FILARIASIS CONTROL—		
Surveyor in Charge .. .. .	1	
Supervisor .. .. .	1	
Senior Inspectors (4) Inspectors (19) Assistants (45) .. .. .	68	
Clerical Staff (2) Pupils (6) .. .. .	8	

APPENDIX II (a)

NOTIFICATION OF INFECTIOUS DISEASES BY DISTRICTS FOR THE YEAR 1954

Name of Disease	SUVA			SOUTHERN				WESTERN								EASTERN		NORTHERN CAKAUDROVE					Rorua- MA	TOTAL					
	Suva Urban	Suva Rural	Aircraft	Ships	Talevu	Rewa	Natiasiri	Serua	Kadavu	Nadroga	Nadi	Lautoka	Ba	Tavua	Nadavivatu	Ra	Aircraft	Ships	Nadi Aerodrome	Lomaiviti	Lau	Macuata			Bua	Taveuni	Savusavu	Rabi	Rotuma
Acute Anterior-poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-spinal meningitis	2	1	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
Chicken-pox	23	5	..	..	16	9	5	2	..	6	10	17	6	10	10	12	..	..	..	..	..	5	10	..	3	4	10	..	
Dysentery—																												..	
(a) Amoebic	2	3	..	..	2	..	..	1	..	..	1	8	4	..	..	1	..	..	..	..	1	..	1	..	..	..	..	21	
(b) Bacillary	4	1	..	..	36	..	..	2	..	7	19	10	15	27	..	19	..	..	..	..	3	3	..	2	1	4	..	153	
(c) Unclassified	2	..	..	..	..	..	..	..	..	5	40	3	10	..	..	..	..	..	..	5	..	1	24	..	..	..	1	91	
Influenza	1,131	780	..	..	1,021	73	312	147	217	131	486	562	258	555	75	327	..	..	..	165	555	558	93	46	343	166	494	8,496	
Measles (Morbilli)	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	7	
Measles (German)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	3	
Mumps	2	..	..	..	..	..	3	..	..	1	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	9	
Typhoid—																												..	
(a) Enteric	..	2	..	..	1	..	..	..	1	..	1	2	1	..	..	..	..	..	..	..	1	..	..	..	3	..	..	12	
(b) Para-typhoid	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Whooping Cough	29	18	..	..	109	2	2	51	..	29	15	102	26	10	..	18	..	..	..	..	3	6	1	..	1	..	..	422	
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
Beriberi	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	72	
Dengue Fever	..	..	..	..	8	1	..	..	..	1	1	4	15	5	..	29	..	..	1	..	10	..	..	..	1	..	..	4	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Encephalitis Lethargic	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	8	
Erysipelas	..	..	..	..	2	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,527	
Infantile diarrhoea	38	2	..	..	197	12	141	35	36	82	114	52	93	270	13	130	..	..	14	70	42	39	6	28	4	..	90	45	
Infective Hepatitis	1	1	..	..	4	..	..	1	..	1	10	13	6	2	..	..	..	..	2	3	..	1	3	1	1	..	..	26	
Leprosy	2	5	..	..	..	1	..	2	2	..	1	..	2	1	..	3	..	..	..	..	..	2	3	1	..	..	..	3	
Leptospirosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	
Malaria	1	1	..	..	..	..	..	..	3	..	..	1	..	..	..	10	..	..	..	..	..	..	2	..	..	1	..	4	
Puerperal Fever	..	..	..	..	..	..	..	1	..	..	1	8	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	
Tetanus	2	..	..	..	4	2	..	1	..	2	5	5	1	3	..	6	..	..	..	1	5	2	..	3	3	..	..	45	
Trachoma	7	1	..	..	7	..	1	2	7	2	10	10	4	1	1	14	..	..	..	1	1	..	1	..	..	..	..	60	
Tuberculosis Pulmonary	62	36	..	..	86	34	37	21	37	16	13	22	42	6	15	17	..	..	1	24	17	39	14	6	16	5	8	574	
Tuberculosis Others	14	7	..	1	10	3	2	5	4	1	..	6	5	2	..	3	..	..	2	4	4	5	4	1	2	5	4	93	
Undulant Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Veneral Diseases—																												..	
(a) Climatic Bubo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(b) Gonorrhoea	74	14	..	1	12	1	..	1	..	2	21	22	17	7	..	3	..	4	5	5	12	2	1	5	1	1	..	211	
(c) Ophthalmia neonatorum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	
Ophthalmia gonorrhoeal	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(d) Soft Chancre	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	12	
(e) Syphilis	3	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(f) Veneral granuloma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(g) Others	282	122	..	..	684	33	156	99	56	410	335	335	54	15	19	435	..	..	4	129	116	117	293	248	60	168	..	4,170	
Yaws	27	20	..	3	29	2	3	6	87	4	10	81	4	3	..	17	..	..	..	13	..	35	..	36	..	..	..	380	
Ankylostomiasis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	1,710	1,042	..	5	2,232	174	662	379	450	704	1,086	1,267	588	917	133	1,047	..	5	204	813	780	367	381	676	261	191	607	16,660	



## APPENDIX II (b)

## NOTIFICATION OF INFECTIOUS DISEASES BY RACE FOR THE YEAR 1954

Disease	Europeans	Part-Europ.	Fijians	Indians	Others	Totals
Acute anterior-poliomyelitis .. ..	....	....	....	....	....	....
Cerebro-spinal meningitis .. ..	....	....	6	3	1	10
Chicken-pox (varicella) .. ..	4	4	105	29	22	164
Dysentery—						
(a) Amoebic .. ..	....	1	7	13	....	21
(b) Bacillary .. ..	3	3	55	85	7	153
(c) Unclassified .. ..	4	....	12	74	1	91
Influenza .. ..	110	257	5,261	2,140	728	8,496
Measles—						
(a) Morbillie .. ..	2	....	4	1	....	7
(b) German .. ..	3	....	....	....	....	3
Mumps .. ..	....	....	8	1	....	9
Typhoid Fever—						
(a) Enteric .. ..	....	....	6	5	1	12
(b) Para-typhoid .. ..	....	....	....	1	....	1
Whooping Cough .. ..	12	4	212	177	17	422
Anthrax .. ..	....	....	....	....	....	....
Beriberi .. ..	....	....	1	1	1	3
Dengue fever .. ..	3	....	51	17	1	72
Diphtheria .. ..	....	....	....	4	....	4
Encephalitis Lethargica .. ..	....	....	1	....	....	1
Erysipelas .. ..	1	....	1	6	....	8
Infantile diarrhoea .. ..	13	26	934	419	135	1,527
Infective Hepatitis .. ..	3	1	18	22	1	45
Leprosy .. ..	....	1	12	9	4	26
Leptospirosis .. ..	....	....	....	....	....	....
Malaria .. ..	....	....	3	....	....	3
Puerperal Fever .. ..	....	1	16	15	1	33
Scarlet fever .. ..	....	....	....	....	....	....
Tetanus .. ..	....	1	22	19	3	45
Trachoma .. ..	1	2	41	16	....	60
Tuberculosis—						
(a) Pulmonary .. ..	11	10	357	142	54	574
(b) Other forms .. ..	....	6	53	28	....	93
Undulant fever .. ..	....	....	....	....	....	....
Venereal disease—						
(a) Climatic Bubo .. ..	....	....	....	....	....	....
(b) Gonorrhoea .. ..	11	8	107	74	11	211
(c) Ophthalmia neonatorum .. ..	....	....	....	....	....	....
Ophthalmia gonorrhoeal .. ..	....	....	2	1	1	4
(d) Soft Chancre .. ..	....	....	....	....	....	....
(e) Syphilis .. ..	....	....	1	10	1	12
(f) Venereal granuloma .. ..	....	....	....	....	....	....
(g) Yaws .. ..	....	14	3,933	76	147	4,170
Ankylostomiasis .. ..	1	4	212	155	8	380
Total .. ..	182	343	11,441	3,543	1,151	16,660

APPENDIX II (c)

NOTIFICATION OF INFECTIOUS DISEASES BY MONTHS FOR THE YEAR 1954

Disease	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Ac. Ant.-poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal meningitis ..	3	1	1	..	2	..	1	..	..	..	..	..	10
Chicken-pox ..	6	6	10	3	11	12	21	14	23	21	11	26	561
Dysentery—													
(a) Amoebic ..	..	5	..	..	3	1	..	..	3	3	4	2	21
(b) Bacillary ..	..	27	39	32	17	5	9	3	4	3	1	4	153
(c) Unclassified ..	..	14	12	9	7	22	6	2	5	1	7	5	91
Influenza ..	181	361	326	286	414	378	612	3,408	1,301	329	475	425	8,496
Measles—													
(a) Morbilli ..	..	1	2	1	..	..	..	..	2	..	1	..	7
(b) German ..	..	..	..	..	..	..	..	1	..	..	..	2	3
Mumps ..	..	..	..	1	..	1	1	..	1	3	2	..	9
Typhoid fever—													
(a) Enteric ..	6	..	1	..	1	..	..	..	..	2	..	2	12
(b) Para-typhoid ..	..	..	..	..	..	..	1	..	..	..	..	..	1
Whooping Cough ..	19	36	30	56	35	25	20	28	28	26	27	92	422
Anthrax ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beriberi ..	..	..	..	..	..	1	..	2	..	..	..	..	3
Dengue Fever ..	1	5	6	4	6	3	10	27	2	7	..	1	72
Diphtheria ..	1	1	1	..	1	..	..	..	..	..	..	..	4
Encephalitis Lethargic ..	..	..	..	..	..	..	1	..	..	..	..	..	1
Erysipelas ..	1	2	..	..	..	2	..	..	1	..	..	2	8
Infantile diarrhoea ..	81	193	203	118	106	50	53	112	64	40	99	408	1,527
Infective Hepatitis ..	2	2	2	7	8	7	2	2	3	4	2	4	45
Leprosy ..	5	..	4	6	2	3	..	3	2	..	..	1	26
Leptospirosis ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria ..	1	1	..	..	..	..	..	1	..	..	..	..	3
Puerperal Fever ..	4	2	1	3	7	4	5	2	2	..	1	2	33
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus ..	2	2	4	2	1	2	7	5	10	..	6	4	45
Trachoma ..	1	2	3	4	2	7	3	2	1	7	13	15	60
Tuberculosis—													
(a) Pulmonary ..	53	44	72	72	80	30	45	71	41	29	25	12	574
(b) Others ..	..	7	4	8	12	14	4	12	6	8	5	8	93
Undulant Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Venereal Diseases—													
(a) Climatic Bubo ..	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Gonorrhoea ..	15	16	21	14	21	15	21	15	21	13	21	18	211
(c) Ophthalmia—													
neonatorum ..	..	..	..	..	..	..	..	..	..	..	..	..	..
gonorrhoeal ..	..	1	..	1	..	..	..	..	..	1	..	1	4
(d) Soft Chancre ..	..	..	..	..	..	..	..	..	..	..	..	..	..
(e) Syphilis ..	2	1	1	2	1	1	1	..	..	..	..	3	12
(f) Ven. granuloma ..	..	..	..	..	..	..	..	..	..	..	..	..	..
(g) Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yaws ..	..	..	2	..	..	2	73	724	899	988	627	855	4,170
Ankylostomiasis ..	4	35	33	28	25	31	47	35	32	48	27	35	380
Total ..	405	765	778	657	762	616	943	4,469	2,451	1,533	1,354	1,927	16,660

APPENDIX III

VITAL STATISTICS

(1) ESTIMATED POPULATION AT 31st DECEMBER, 1954

Race	Male	Female	Total	(1953)	Difference	Per cent increase	Population per sq. mile
Fijians ..	72,639	70,461	143,100	139,373	+ 3,727	2.7	20.33
Indians ..	84,583	75,720	160,303	154,803	+ 5,500	3.6	22.77
Europeans ..	4,831	3,629	8,460	8,422	+ 38	.45	1.49
Part-Europeans ..	4,003	3,745	7,748	7,496	+ 252	3.4	1.10
Polynesians ..	2,930	2,058	4,988	4,133	+ 855	20.69	.71
Rotumans ..	2,098	2,036	4,134	3,990	+ 144	3.5	.59*
Chinese ..	2,643	1,342	3,985	3,877	+ 108	2.8	.57
Others ..	358	313	671	662	+ 9	1.4	.10
Totals ..	171,115	157,246	328,401	318,623	+ 9,778	3.1	47.36

\* Rotuman population-density expressed for whole colony-area: if all Rotumans lived on Rotuma density there would be 229.67 per square mile.



## (2) BIRTHS RECORDED DURING YEARS 1951-1954

Race	1951	1952	1953	1954	Crude birth-rate per Mille, 1954
Fijians .. ..	4,575	4,983	4,903	5,294	37.00
Indians .. ..	6,056	6,650	7,133	6,921	43.17
Europeans .. ..	108	113	139	145	17.14
Euronesian . . .	239	257	243	286	36.91
Rotumans .. ..	185	171	194	191	46.20
Polynesians, etc. . .	143	185	169	184	36.90
Chinese .. ..	134	139	148	103	25.85
Others .. ..	1	14	7	80	119.92
Total .. ..	11,441	12,512	12,936	13,204	39.61

## (3) DEATHS RECORDED DURING YEARS 1951-1954

Race	1951	1952	1953	1954	Crude death-rate per Mille, 1954
Fijians .. ..	1,659	2,004	1,478	1,531	11.00
Indians .. ..	1,252	1,325	1,257	1,378	8.60
Europeans .. ..	33	35	20	34	4.02
Euronesians . . .	58	42	45	34	4.39
Rotumans .. ..	61	119	49	47	11.37
Polynesians, etc. . .	69	58	48	60	12.03
Chinese .. ..	18	18	28	16	4.02
Others .. ..	....	5	1	6	8.94
Total .. ..	3,150	3,606	2,926	3,106	9.32

## MARRIAGES, BIRTHS, DEATHS AND NATURAL INCREASE—1954

Race	Marriages	Births	Deaths	Net Increase	1953 Total	Increase per Mille.
Fijians .. ..	1,002	5,294	1,531	3,763	139,373	27
Indians .. ..	1,476	6,921	1,378	5,543	154,803	36
Europeans . . .	55	145	34	111	8,422	13
Euronesians .. .	60	286	34	252	7,496	34
Rotumans .. ..	38	191	47	144	3,990	37
Polynesians .. .	21	184	60	124	4,599	27
Chinese .. ..	14	103	16	87	3,877	22
Others .. ..	6	80	6	74	662	11
Totals .. ..	2,672	13,204	3,106	10,098	323,222	31

Note:—The Registrar-General has published amended 1953 figures.

## INFANT AND CHILD MORTALITY

	Births	DEATHS						Infant Mortality Rate per Mille
		Under 1	1-2	2-3	3-4	4-5	Total	
1952—Fijians .. ..	4,983	394	237	79	34	31	775	79
Indians .. ..	6,650	341	45	19	13	10	428	51
1953—Fijians .. ..	4,903	293	138	40	20	14	505	60
Indians .. ..	7,133	341	28	13	9	9	400	48
1954—Fijians .. ..	5,294	267	131	44	20	13	475	50
Indians .. ..	6,921	340	44	20	15	12	431	49

## APPENDIX IV (a)

## HOSPITALS AND DISPENSARIES

1. Disposition of Hospitals—								Beds
Colonial War Memorial Hospital, Suva .								275
Tamavua Tuberculosis Hospital, Suva..								313
Mental Hospital, Suva ..								100
Fiji Leprosy Hospital, Makogai..								750
<i>District Hospitals—</i>								
Lautoka ..								150
Labasa ..								100
Levuka ..								26
<i>Subsidized Hospitals—</i>								
Methodist Mission Hospital, Ba .								41
Nurse Morrison's Maternity Home, Suva ..								8
Waiyevo Cottage Hospital, Taveuni ..								4
Private Hospital, Colonial Sugar Refining Company, Ba								12
<i>Rural Hospitals—</i>								
Wainibokasi ..								51
Waiyevo, Taveuni .								52
Vunidawa ..								30
Koromumu, Sigatoka ..								38
Penang, Rakiraki, Ra ..								25
Nadi ..								26
Nailaga, Ba ..								26
Savusavu ..								40
Vunisea, Kadavu .								26
Lomaloma, Lau ..								16
Nabouwalu, Bua ..								26
Rotuma ..								12
Lakeba, Lau ..								8
Matuku ..								9
Total number of beds available ..								2,164

See Appendix V for details of outpatients.

See Appendix VI for details of inpatients.

## 2. Disposition of Urban and Rural Dispensaries—

*In Suva—*

Suva Gaol.

Samabula.

Tamavua Outpatients (General) Dispensary.

*Southern District (under District Medical Officer, Nausori)—*

Beqa Island

Nausori Clinic

Combined Schools, at Lodon

Navua

Korolevu, Tailevu North

Nayavu

Lodon

Serua Is. (closed Oct. 1954)

Lomanikoro

Viria

Mokani

Yaro, Kadavu

*Southern District (Lomaiviti sub-district)—*

Gau

Koro

Kabara

Moala.

*Western District (under District Medical Officer, Lautoka)—*

Korolevuiwai

Natuatuacoko

Nadarivatu

Naviti, Yasawa

Nadi Airport (administered  
from Suva)

Sautabu

Namarai

Tavua

Nanukuloa

Vatukoula

Nasau

Vitogo (closed 1952/53).

*Northern District (under District Medical Officer, Labasa)—*

Dreketi

Visoqo

Lekutu

Wainikoro

Naduri

Wainunu

Udu.

*Northern District (Taveuni sub-district)—*

Kioa Island Community

Rabe Island Community

Natewa

Saqani

Tukavesi.

Total Rural Dispensaries—44.

See Appendix IV (b) for details of out-patients.



## APPENDIX IV (b).

The following tables show the analysis of Inpatients and Outpatients for the year 1954.

## 1. CENTRAL AND DISTRICT HOSPITALS ADMISSIONS RACIAL DISTRIBUTION

Race	C.W.M. Hospital	Lautoka	Levuka	Labasa	Tamavua	Total
Fijians .. .. .	1,746	967	404	446	333	3,896
Indians .. .. .	1,657	2,989	67	1,488	88	6,289
Europeans and Euronians .. .. .	527	325	46	19	21	938
Chinese and Others .. .. .	259	197	57	41	45	599
Total .. .. .	4,189	4,478	574	1,994	487	11,722

## 2. OUT-PATIENTS THROUGHOUT THE COLONY

Race	C.W.M. Hospital	Tamavua	3 District Hospitals	14 Rural Hospitals	Rural Dispensaries	Totals
Fijians .. .. .	16,423	1,318	10,430	36,859	104,869	169,899
Indians .. .. .	12,539	469	37,590	37,390	31,493	119,481
Europeans and Euronians .. .. .	1,721	109	1,543	152	4,230	7,755
Chinese and Others .. .. .	3,023	152	687	7,680	7,156	18,698
Totals .. .. .	33,706	2,048	50,250	82,081	147,748	315,833

## 3. GENERAL AND RURAL HOSPITALS—ADMISSIONS.

Hospitals	Beds	Occupied Beds Daily Average	Admissions
Colonial War Memorial Hospital .. .. .	275	232	4,189
Tamavua .. .. .	313	295	487
Three District Hospitals .. .. .	276	190	7,046
Fourteen Rural Hospitals .. .. .	365	....	6,588
Totals .. .. .	1,229	....	18,310

## 4. COLONIAL WAR MEMORIAL HOSPITAL OUT-PATIENTS—SUVA AREA

Attended by	Fijians	Indians	Europ., etc.	Others	Totals
European Medical Officers .. .. .	916	1,281	636	463	3,296
Dental Department .. .. .	3,038	3,726	1,078	890	8,732
Eye Department .. .. .	921	1,093	....	393	2,407
A.M.P. Casualty Department . .. .	11,548	6,439	7	1,277	19,271
Samabula Dispensary .. .. .	265	1,038	....	22	1,325
Totals .. .. .	16,688	13,577	1,721	3,045	35,031

## APPENDIX V

## COLONIAL WAR MEMORIAL HOSPITAL: SUVA

1. *Staff*—Medical Officer in charge, Surgeon Specialist, Medical Specialist, three general duties Medical Officers, two specialist Assistant Medical Practitioners, and four Assistant Medical Practitioners as resident housemen.

2. The Nursing Staff comprises, Matron, Assistant Matron, an average of twenty European Nursing Sisters, supplemented by locally trained staff nurses and student nurses.

3. One nurse from Tonga and two from the Cook Islands were engaged in refresher courses.

4. *Assistant Medical Practitioners' Out-Patients Department*—This continues to be inadequate in structure. It is sited at a distance from the main hospital and supervision is difficult.

5. A plan has been put forward to convert a portion of the main building to an adequate free out-patient department where a Medical Officer and Sister can provide better supervision.

6. *Casualty Department (Main Hospital)*—This department is used for injections and incisions referred from Paying Out-Patient Department, for casualties after 4 p.m. and for severe accident and police cases at any time. This practice would be unnecessary if the new scheme for out-patients is approved.

7. *Paying Out-Patient Department*—There has been an increase in the sizes of all clinics.

Each morning 8.30 until 11 a.m. . . . .	Medical Officer
Afternoons—Monday . . . . .	Physician Specialist
Tuesday . . . . .	Orthopaedic clinic
Wednesday . . . . .	Ward follow up. Surgical
Thursday . . . . .	Surgeon Specialist
Friday . . . . .	Physician Specialist.

8. *Obstetric Ward*—This ward has been under the charge of Dr. D. J. Oldmeadow. It is noteworthy that there were no maternal deaths out of 1,552 admissions in 1954, and that there were about 15 caesarean sections. This figure of one per cent is accepted as normal in the best obstetrical clinics. A detailed analysis follows:—

## OBSTETRIC WARD

No. of Admissions—	Fijians	Indians	Others	Total
Total No. of Admissions . . . . .	509	908	134	1,552
No. of Births . . . . .	454	723	129	1,306
No. of Normal Labour . . . . .	408	578	119	1,105
Abnormal Births . . . . .	46	145	10	201
As follows: Caesarian . . . . .	6	9	1	16
Breech . . . . .	4	17	2	23
Brow . . . . .	..	1	..	1
Face . . . . .	1	3	1	5
Shoulder . . . . .	1	..	..	1
Persistent Posterior . . . . .	5	8	1	14
Multiple . . . . .	9	8	1	18
Premature Births . . . . .	12	63	3	78
Stillbirths . . . . .	8	36	1	45
Complications—				
Toxaemia . . . . .	6	64	3	73
Eclampsia . . . . .	..	7	..	7
Ante-Partum Haemorrhage . . . . .	4	12	..	16
Post-Partum Haemorrhage . . . . .	41	21	18	80
Retained Placenta . . . . .	4	5	1	10
Placenta Praevia . . . . .	3	6	..	9
Anaemia . . . . .	1	25	..	36
Pyelitis . . . . .	..	..	..	..
Contracted Pelvis . . . . .	3	7	..	10
Intercurrent Infection . . . . .	26	23	3	52
Instrumental Cases . . . . .	6	12	..	18
Deaths: Maternal . . . . .	..	..	..	Nil
Neo-Natal . . . . .	4	33	2	39
Ante-Natal Clinic—				
First Visits . . . . .	531	1,477	103	2,111
Return Visits . . . . .	1,887	3,228	316	5,731
Total . . . . .	2,418	5,005	419	7,842

9. *X-ray Department*—Miss R. M. Mathews resigned and left the post of radiographer on June 30th. Mr. G. Tidswell took up duty as radiographer on 23rd October. Assistant Medical Practitioner K. Lal acted as radiographer.

Fluorescent tube lighting has been installed and improvement in the ventilation contributed to more comfortable working conditions.

This year showed an increase in the service of the department

	European	Fijian	Indian	Others
In-Patients . . . . .	169	1,210	829	269
Out-Patients . . . . .	847	3,934	3,665	933
Staff . . . . .	70	162	61	44
No. of chest films . . . . .	574	4,172	3,847	812
Total number of X-rays—11,856.				



10. *Operating Theatre*—The theatre block was reconditioned during a five week period in September and October during which no operations except emergencies were performed.

Operations performed during the year at the Colonial War Memorial Hospital.

<i>Head</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	4
Suture of scalp .. .. .	..	..	..	..	1	Elevation of depressed fracture .. .. .	..	..	..	1		
Elevation of Zygoma .. .. .	..	..	..	..	2							
<i>Ophthalmic</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	294
Injury to eye .. .. .	..	..	..	..	1	Plastic repair eyelid .. .. .	..	..	..	5		
Extraction of lens .. .. .	..	..	..	..	137	Pterygium .. .. .	..	..	..	77		
Excision of growth .. .. .	..	..	..	..	1	Strabismus correction .. .. .	..	..	..	2		
Enucleation .. .. .	..	..	..	..	4	Prolapsed iris .. .. .	..	..	..	1		
Extirpation of lachrymal sac .. .. .	..	..	..	..	1	Removal of cysts .. .. .	..	..	..	18		
Evisceration of eye .. .. .	..	..	..	..	1	Removal of Foreign Body .. .. .	..	..	..	3		
Iridectomy .. .. .	..	..	..	..	11	Tarsoplasty .. .. .	..	..	..	17		
Cataract (needling) .. .. .	..	..	..	..	8	Trephine .. .. .	..	..	..	7		
<i>Dental</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	2
Extraction .. .. .	..	..	..	..	1	Excision osteomyelitis .. .. .	..	..	..	1		
<i>Ear, Nose and Throat</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	62
Antrum lavage .. .. .	..	..	..	..	4	Aural polyp .. .. .	..	..	..	2		
Adenoidectomy .. .. .	..	..	..	..	2	Salivary calculus .. .. .	..	..	..	1		
Biopsy maxilla .. .. .	..	..	..	..	1	Repacking mastoid .. .. .	..	..	..	1		
Mastoid radical and simple .. .. .	..	..	..	..	13	Repair of cleft palate .. .. .	..	..	..	1		
Laryngoscopy .. .. .	..	..	..	..	5	Submucous resection .. .. .	..	..	..	6		
Cranio-pharyngioma .. .. .	..	..	..	..	1	Tonsil dissection .. .. .	..	..	..	16		
Nasal polyp .. .. .	..	..	..	..	9							
<i>Thyroid</i> .. .. .	..	..	..	..	..	..	..	..	..	..	5	
Subtotal thyroidectomy .. .. .	..	..	..	..	3	Thyroid adenoma .. .. .	..	..	..	2		
<i>Breast</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	8
Simple mastectomy .. .. .	..	..	..	..	4	Sinus of breast .. .. .	..	..	..	1		
Biopsy .. .. .	..	..	..	..	1	Wedge resection for papilloma .. .. .	..	..	..	1		
Cyst adenoma .. .. .	..	..	..	..	1							
<i>Chest</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	15
Aspiration of pleural cavity .. .. .	..	..	..	..	2	Repacking cavity .. .. .	..	..	..	4		
Thoracoplasty .. .. .	..	..	..	..	3	Repair of chest wound .. .. .	..	..	..	1		
Packing pleural space .. .. .	..	..	..	..	2	Removal neurofibroma .. .. .	..	..	..	1		
Rib resection drainage .. .. .	..	..	..	..	1	Removal safety pin from trachea .. .. .	..	..	..	1		
<i>Gastro-Intestinal</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	177
Appendicectomy .. .. .	..	..	..	..	71	Perforated ulcers .. .. .	..	..	..	5		
Drainage appendix abscess .. .. .	..	..	..	..	6	Perforated small intestine .. .. .	..	..	..	1		
Cholecystectomy .. .. .	..	..	..	..	2	Pyloric stenosis (Ramstedt) .. .. .	..	..	..	1		
Colostomy .. .. .	..	..	..	..	4	Vagotomy .. .. .	..	..	..	3		
Closure of colostomy .. .. .	..	..	..	..	1	Haemorrhoidectomy .. .. .	..	..	..	13		
Dilation of anus .. .. .	..	..	..	..	1	Intussusception .. .. .	..	..	..	4		
Abdominal abscesses .. .. .	..	..	..	..	3	Laparotomy (various) .. .. .	..	..	..	14		
Entero-enterostomy .. .. .	..	..	..	..	2	Oesophagoscopy .. .. .	..	..	..	2		
Meckels diverticulum .. .. .	..	..	..	..	2	Rt. Hemicolectomy .. .. .	..	..	..	1		
Adenoma of umbilicus .. .. .	..	..	..	..	1	Rectal stricture .. .. .	..	..	..	1		
Fistula in ano .. .. .	..	..	..	..	11	Splenectomy .. .. .	..	..	..	1		
Partial gastrectomy .. .. .	..	..	..	..	4	Sigmoidoscopy .. .. .	..	..	..	16		
Gastro-enterostomy .. .. .	..	..	..	..	3							
<i>Hernia Repairs</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	56
Inguinal hernia .. .. .	..	..	..	..	43	Strangulated .. .. .	..	..	..	6		
Epigastric .. .. .	..	..	..	..	1	Umbilical .. .. .	..	..	..	1		
Incisional .. .. .	..	..	..	..	3	Femoral .. .. .	..	..	..	2		
<i>Elephantiasis of Scrotum</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	8
<i>Diathermy</i> .. .. .	..	..	..	..	..	..	..	..	..	..	..	10
Cervix .. .. .	..	..	..	..	2	Rodent ulcer of ear .. .. .	..	..	..	3		
Bladder .. .. .	..	..	..	..	4	Wart on foot .. .. .	..	..	..	1		





13. *Deaths*—A list of deaths occurring in the Colonial War Memorial Hospital is noted below:—

	Europeans	Fijians	Indians	Others
Tuberculosis of—				
respiratory system .. .. .	.	3	3	1
meninges and central nervous system .. .	.	3	4	.
Tuberculosis, all other forms .. .. .	.	.	.	1
Amoebiasis . .. .	.	1	1	2
Whooping cough .. .. .	.	1	.	.
Tetanus .. .. .	.	3	3	1
Malignant neoplasm of—				
buccal cavity and pharynx .. .. .	.	1	.	.
oesophagus .. .. .	1	.	.	.
stomach . .. .	.	3	.	.
intestine .. .. .	.	.	1	.
rectum .. .. .	.	.	1	.
uterus .. .. .	.	1	.	.
bone and connective tissue .. .. .	.	1	.	1
other sites .. .. .	.	1	2	2
Leukaemia and aleukaemia .. .. .	1	.	4	.
Lymphosarcoma .. .. .	.	1	.	.
Diabetes mellitus . .. .	1	1	1	.
Pernicious anaemia .. .. .	.	1	3	.
Vascular lesions affecting C.N.S. .. .. .	1	4	7	3
Nonmeningococcal meningitis .. .. .	.	5	1	.
Otitis media and mastoiditis .. .. .	.	.	1	.
All other diseases of the nervous system and sense organs .. .. .	.	1	.	.
Chronic rheumatic heart disease . .. .	.	1	3	.
Arteriosclerotic and degenerative heart disease .	.	4	16	.
Other diseases of heart .. .. .	2	1	5	.
Hypertension with heart disease .. .. .	.	1	2	.
Other diseases of circulatory system .. .. .	.	.	1	.
Lobar pneumonia .. .. .	1	1	.	.
Bronchopneumonia .. .. .	1	4	14	.
Other and unspecified pneumonia .. .. .	.	1	.	.
Acute bronchitis .. .. .	.	.	1	.
Ulcer of—				
stomach . .. .	.	2	.	.
Duodenum .. .. .	.	1	3	.
Appendicitis .. .. .	.	1	.	.
Gastro-enteritis and colitis—				
between 4 weeks and 2 years . .. .	.	5	1	1
2 weeks and over .. .. .	.	1	.	.
Cirrhosis of liver .. .. .	1	2	1	1
Cholelithiasis and cholecystitis .. .. .	.	.	.	.
Other diseases of digestive system .. .. .	.	3	3	1
Acute nephritis .. .. .	.	1	1	.
Chronic nephritis .. .. .	.	.	3	.
Calculi of urinary system . .. .	.	.	1	.
Hyperplasia of prostate .. .. .	1	.	1	.
All other diseases of—				
genito-urinary system . .. .	.	1	4	2
musculo-skeletal system .. .. .	.	1	.	.
Birth injuries .. .. .	.	1	.	.
Diarrhoea of newborn .. .. .	.	.	1	.
All other diseases of early infancy .. .. .	.	1	4	.
Ill-defined diseases peculiar to early infancy and immaturity .. .. .	.	.	2	.
Senility .. .. .	.	.	1	.
Fracture of—				
skull .. .. .	.	2	.	.
spine and trunk .. .. .	.	.	1	.
Limbs .. .. .	.	.	.	1
Burns .. .. .	.	2	2	.
Effects of poisons . .. .	.	.	1	.

APPENDIX VI (a)

TUBERCULOSIS DIVISION—1954

1. Dr. L. G. Poole, M.B., Ch.B., D.P.H., returned from leave and resumed duties as Tuberculosis Control Officer. Dr. G. D. Murphy, M.B., Ch.B., continued as Medical Officer-in-Charge, Tamavua Hospital.

2. *Tuberculosis Control*—A register of all new cases of tuberculosis that are notified is kept by the Epidemiological Section of the Medical Department.

					1952	1953	1954
European	..	..	..	..	3	11	11
Part-European	..	..	..	..	9	7	16
Fijian	..	..	..	..	301	359	410
Indian	..	..	..	..	95	93	170
Others	..	..	..	..	45	28	54
Total					453	498	667

3. *Tamavua Tuberculosis Hospital*—Tamavua Hospital consists of five large wards with a verandah along one side and end of each ward. A thirty-two bed ward was brought into use during the year: this building and the equipment were gifts from the Fiji War Memorial Anti-Tuberculosis Trust Fund. In addition there is a four-bed ward which is in use for post-operative surgical cases, and a few single rooms. A recreation room is available for the showing of films and for other forms of organized entertainment. The kitchen provides a minimum of one thousand meals per day.

4. Hospital Returns and Statistics—1953 and 1954.

	European		Part-Europ.		Fijian		Indian		Others		Total	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
Admissions	3	4	12	17	253	333	67	88	25	45	360	487
Discharges	..	3	..	15	..	253	..	70	..	32	248	373
Deaths	..	..	1	..	32	33	18	7	2	2	53	42
Old cases re-admitted	..	..	..	..	..	..	..	..	..	..	58	123
Old cases transferred to Rural Hospitals	..	..	..	..	..	..	..	..	..	..	6	50
C.W.M. Hospital for confinement or urgent operation	..	..	..	..	..	..	..	..	..	..	18	22
Daily average number of In-patient	..	..	..	..	..	..	..	..	..	..	262	295
In hospital on 31/12/53	..	..	..	..	..	..	..	..	..	..	270	304

A small non-tuberculous Out-patients' Department operates for treating emergencies and the minor ailments of the staff and of the Fijians and Indians living in the neighbourhood. Ordinary cases are seen daily between 8 a.m. and 9 a.m.—emergencies, at any time.

5. *Tuberculosis Out-Patient Department*—The Tuberculosis Out-patient Department is extremely busy as it deals with cases for investigation and review, collapse therapy refills, and also maintains a Chest X-ray interpretation service for the Southern area. The work of this department is increasing annually, due to the greater emphasais which is being placed on the prevention of spread of this disease.

6. The number of people attending for investigation or review was 1,285 in 1952, 2,058 in 1953, and 2,048 in 1954. A reduction from 14,095 in 1953, to 10,639 in 1954, in the films received for interpretation from other hospitals was brought about by the tuberculosis wards in the Northern and Western areas inaugurating their own film interpretation service.

7. *Laboratory*—The laboratory at Tamavua Hospital is staffed by four Fijian technicians under an Assistant Medical Practitioner, and is equipped to carry out routine sputum and blood examinations on patients and staff. Other more elaborate investigations are referred to the central laboratory at Suva.

Comparison of the examinations made during 1952, 1953 and 1954.

Year	Sputum			P.L. Swab			BSR	Mantoux	BCG	Blood Examination				Specimens sent to Suva Lab.	Guinea Pig Inoculation
	Dir.	Conc.	Cult.	Dir.	Conc.	Cult.				FBC	HB.	HB. RBC. WBC.	Total		
1952	4,760	32	104	694	31	111	2,179	559	21	725	4	40	769	708	10
1953	7,587	56	135	531	86	175	3,654	379	..	170	..	574	744	685	..
1954	5,338	181	24	1,666	431	245	3,594	287	78	461	..	240	701	927	..



A Mobile static X-ray unit, capable of working at 200 ma and equipped with Tomography and mass miniature attachments, is installed at the Hospital. X-ray exposures are made at the bedside with the use of a Watson Victor D.3 Unit. The exposures and developing process are undertaken by three Fijians who are being trained locally.

The returns of the X-ray Department follow:—

Year	Fijians			Indians			Europeans			P/European			Rotumans			Others			Total
	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	
1952	653	706	303	231	309	21	3	43	35	40	51	7	43	40	16	70	86	3	2,660
1953	1,254	1,275	563	356	478	116	25	81	63	39	57	12	67	41	12	59	126	5	4,629
1954	1,401	1,474	595	358	620	60	11	94	50	80	72	19	37	48	18	99	126	9	5,161

IP. = In-Patient.      OP. = Out-Patient.      ST. = Staff

8. A dental clinic for in-patients of Tamavua Hospital was established at the Hospital in 1952, and has been fully equipped by the Anti-Tuberculosis Fund. At least two dental sessions were held each week during the period under review.

9. In the Operating Theatre the following procedures were carried out during 1954:—

Apicolysis with polythene ball plompage	..	..	..	30
Phreniclasia	..	..	..	111
Lung decortication	..	..	..	1
Empyema Drainage	..	..	..	2
Appendicectomy	..	..	..	1
Circumcisions	..	..	..	3
Artificial Pneumothorax	..	..	..	8
Pneumo peritoneum	..	..	..	109
Artificial Pneumothorax refills	..	..	..	351
Pneumoperitoneum refills	..	..	..	8,291

10. The Occupational Therapy Section continues to prove popular with the patients. One of the main items produced is a chair with a cane back and seat. Patients are engaged in making the seats and backs; other items made are baskets and walking sticks. Knitting, embroidery, and crochet work is given to the bed patients, and all take a keen interest. Assistance in these last named occupations was given by members of the Fiji branch of the British Red Cross Society who attended the hospital each week.

11. Motion pictures have been shown each week for the benefit of the patients. Local amateur organizations gave concerts during the year and their voluntary efforts have been greatly appreciated by the patients and staff.

12. St. Andrews' Guild visited the Hospital prior to Christmas and distributed gifts to all patients. The Hospital Christmas tree was held on Christmas morning and gifts which were purchased from the Patient's Comfort Fund, and Occupational Therapy profits were distributed to each patient in the Hospital.

13. At the Tamavua Hospital Plantation during the year 1954, root crops and vegetables were harvested to the value of £1,123 8s. 7d., 3,084 dozen eggs valued at £969 3s. 2d. were obtained from the poultry farm.

ANTI-TUBERCULOSIS CAMPAIGN

14. Preliminary tuberculosis survey in Fiji was commenced in 1950 and completed in 1953. An analysis of 32,694 Mantoux reactions, obtained on Viti Levu, Ovalau, Beqa, Rotuma and Rabi Islands is recorded in the following tables.

15. The B.C.G. programme originally commenced as part of the Mantoux survey, was continued throughout the year. Emphasis was placed on training Assistant Medical Practitioners and Health Sisters in the technique of B.C.G. Vaccination.

16. The Mobile mass miniature X-ray unit, which was a gift from the Fiji War Memorial Anti-Tuberculosis Trust Fund, became fully operative during the latter half of the year and made a very successful tour of the Western District from Tavua to Sigatoka. More than 5,600 chest X-rays were taken of the people in the towns, and villages of the area. The cinematograph projector, which is attached to this unit proved a great asset and was employed in showing educational health films with unqualified success.

17. The hospital accommodation for the tuberculous was increased during 1954 by an additional ward of 32 beds at Labasa. A similar ward at Tamavua Hospital was also brought into use of patients. Both these wards and the equipment were gifts from the War Memorial Anti-Tuberculosis Trust Fund. There were 392 beds in recognized tuberculosis wards at December 31st,

MANTOUX INDICES

18. Mantoux reactions obtained 1/10 c. c. of 1 in 1,000 dilution of old tuberculin—

1. FIJIANS—These mantoux reactions were obtained from people living on Viti Levu, Ovalau, and Beqa:—

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 1 ..	201	4	1.99	105	1	0.96	96	3	3.13
1— 2 ..	413	24	5.81	212	14	6.60	201	10	4.98
2— 3 ..	398	30	7.61	209	16	7.66	185	14	7.57
3— 4 ..	564	57	10.11	321	34	10.59	243	23	9.47
4— 5 ..	465	82	17.63	230	39	16.96	235	43	18.30
5— 6 ..	459	96	20.92	206	33	16.02	253	63	24.90
6— 7 ..	630	161	25.56	316	86	27.22	314	75	23.89
7— 8 ..	650	177	27.23	333	100	30.03	317	77	24.29
8— 9 ..	714	225	31.51	373	109	29.22	341	116	34.02
9—10 ..	664	262	39.46	344	143	41.57	320	119	37.19
10—11 ..	755	356	47.15	387	173	44.70	368	183	49.73
11—12 ..	689	356	51.67	364	192	52.75	325	164	50.46
12—13 ..	675	365	54.07	379	202	53.30	296	163	55.07
13—14 ..	678	409	60.32	384	242	63.02	294	167	56.80
All Ages ..	7,951	2,604	....	4,163	1,384	....	3,788	1,220	....

2. EUROPEAN, EURONESIAN AND OTHER RACES

AGE GROUP	EUROPEAN			PART-EUROPEAN			OTHERS		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 1 ..	2	0	....	0	0	....	1	0	....
1— 2 ..	1	0	....	3	1	33.33	6	0	....
2— 3 ..	5	0	....	6	0	....	1	0	....
3— 4 ..	4	0	....	10	2	20.00	7	2	28.57
4— 5 ..	9	0	....	8	1	12.50	3	0	....
5— 6 ..	31	3	9.68	34	1	2.94	16	3	18.75
6— 7 ..	38	6	15.79	78	11	14.10	22	3	13.64
7— 8 ..	41	4	9.76	91	17	18.68	28	6	21.43
8— 9 ..	49	3	6.12	109	15	13.76	44	12	27.27
9—10 ..	49	4	8.16	92	20	21.74	44	11	25.00
10—11 ..	42	7	16.67	115	35	33.91	46	21	45.65
11—12 ..	29	8	27.59	76	29	38.16	61	27	44.26
12—13 ..	34	10	29.41	65	31	47.69	56	32	57.14
13—14 ..	29	7	24.14	74	39	52.70	64	30	46.88
All Ages ..	363	52	....	761	206	....	399	147	....

3. BANABANS: Living on Rabi Island.

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 1 ..	20	....	....	11	....	....	9	....	....
1— 2 ..	25	4	16.00	14	2	14.29	11	2	18.18
2— 3 ..	37	7	18.92	14	1	7.14	23	6	26.09
3— 4 ..	34	7	20.59	26	4	15.38	8	3	37.50
4— 5 ..	18	8	44.44	10	5	50.00	8	3	37.50
5— 6 ..	30	13	43.33	17	9	52.94	13	4	30.77
6— 7 ..	25	11	44.00	13	5	38.46	12	6	50.00
7— 8 ..	20	15	75.00	13	10	76.92	7	5	71.43
8— 9 ..	14	8	57.14	6	2	33.33	8	6	75.00
9—10 ..	13	9	69.23	7	5	71.43	6	4	66.67
10—11 ..	24	20	83.33	12	10	83.33	12	10	83.33
11—12 ..	16	14	87.50	9	8	88.89	7	6	85.71
12—13 ..	24	20	83.33	12	10	83.33	12	10	83.33
13—14 ..	16	14	87.50	8	8	100	8	6	75.00
14—15 ..	23	17	73.91	8	5	62.50	15	12	80.00



4. FIJIAN RACE

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 4 ..	1,903	181	9.51	1,005	97	9.65	898	84	9.35
5— 9 ..	3,105	894	28.79	1,641	466	28.40	1,464	428	29.23
10—14 ..	3,413	1,833	53.71	1,901	1,007	52.97	1,512	826	54.63
15—19 ..	1,422	1,085	76.30	737	579	78.56	685	506	73.87
20—24 ..	778	681	87.53	290	252	86.90	488	429	87.91
25—29 ..	818	746	91.20	330	309	93.64	488	437	89.55
30—34 ..	710	673	94.79	306	294	96.08	404	379	93.81
35—39 ..	624	598	95.83	324	311	95.99	300	287	95.67
40—44 ..	435	423	97.24	204	200	98.04	231	223	96.54
45—49 ..	416	405	97.36	218	213	97.71	198	192	96.97
50—54 ..	380	367	96.58	173	168	97.11	207	199	96.14
55—59 ..	191	180	94.24	120	114	95.00	71	66	92.96
60—64 ..	278	270	97.12	160	153	95.63	118	117	99.15
65 ..	269	256	95.17	193	182	94.30	76	74	97.37
All Ages ..	14,742	8,592	....	7,602	4,345	....	7,140	4,247	....

5. INDIANS

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 4 ..	680	135	19.85	344	63	18.31	336	72	21.43
5— 9 ..	4,483	1,335	29.78	2,352	617	26.23	2,131	718	33.69
10—14 ..	3,959	1,621	40.94	2,249	928	41.26	1,710	693	40.53
15—19 ..	916	686	74.89	605	494	81.65	311	192	61.74
20—24 ..	418	337	80.62	230	200	86.96	188	137	72.87
25—29 ..	317	260	82.02	182	156	85.71	135	104	77.04
30—34 ..	273	224	82.05	145	124	85.52	128	100	78.13
35—39 ..	211	184	87.20	132	113	85.61	79	71	89.87
40—44 ..	133	117	87.97	78	68	87.18	55	49	89.09
45—49 ..	64	59	92.19	41	39	95.12	23	20	86.96
50—54 ..	72	65	90.28	45	41	91.11	27	24	88.89
55—59 ..	65	63	96.92	43	41	95.35	22	22	100
60—64 ..	99	89	89.90	80	70	87.55	19	19	100
65 ..	42	41	97.62	32	32	100	10	9	90
All Ages ..	11,732	5,216	....	6,558	2,986	....	5,176	2,230	....

6. EUROPEAN, EURONESIAN AND OTHER RACES

AGE GROUP	EUROPEAN			PART-EUROPEAN			OTHERS		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 4 ..	22	0	....	27	3	11.11	18	7	38.89
5— 9 ..	169	20	11.83	398	64	16.08	155	26	16.77
10—14 ..	153	40	26.14	388	162	41.75	281	196	69.75
15—19 ..	39	12	30.77	89	53	59.55	134	119	88.81
20—24 ..	2	0	....	8	2	25.00	24	20	83.33
25—29 ..	8	8	100	3	3	100	5	5	100
30—34 ..	6	3	50.00	1	0	....	2	2	100
35—39 ..	11	4	36.37	2	1	50.00	2	2	100
40—44 ..	3	1	33.33	2	2	100	3	3	100
45—49 ..	3	2	66.67	0	0	....	2	2	100
50—54 ..	1	1	100	0	0	....	3	3	100
55—59 ..	0	0	....	0	0	....	0	0	....
60—64 ..	0	0	....	0	0	....	1	1	100
65 ..	0	0	....	0	0	....	1	1	100
All Ages ..	417	89	....	918	290	....	631	387	....

7. ROTUMANS: Living on Rotuma Island

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 4 ..	443	7	1.58	227	6	2.64	216	1	0.46
5— 9 ..	483	68	14.08	234	45	19.23	249	23	9.24
10—14 ..	399	116	29.07	203	60	29.56	196	56	28.57
15—19 ..	275	126	45.82	139	70	50.36	136	56	41.18
20—24 ..	246	172	69.92	116	79	68.10	130	93	71.54
25—29 ..	186	159	85.48	95	79	83.16	91	80	87.91
30—34 ..	133	119	89.47	66	63	95.45	67	56	83.58
35—39 ..	163	148	90.80	82	78	95.12	81	70	86.42
40—44 ..	89	78	87.64	.....	.....	.....	89	72	87.64
45—49 ..	107	101	94.39	57	57	100	50	44	88.00
50—54 ..	74	67	90.54	34	31	91.18	40	36	90.00
55—59 ..	34	28	82.35	20	18	90.00	14	10	71.43
60—64 ..	29	27	93.10	16	14	87.50	13	13	100
65 ..	30	27	90.00	24	22	91.67	6	5	83.33
All Ages ..	2,591	1,243	46.19	1,313	622	47.37	1,378	621	45.07

8. BANABANS: Living on Rabi Island

AGE GROUP	BOTH SEXES			MALES			FEMALES		
	Number Examined	Number Positive	Percentage Positive	Number Examined	Number Postive	Percentage Positive	Number Examined	Number Positive	Percentage Postitive
0— 4 ..	134	26	19.40	75	12	16.00	59	14	23.73
5— 9 ..	102	56	54.90	56	31	55.36	46	25	54.35
10—14 ..	103	85	82.52	49	41	83.67	54	44	81.48
15—19 ..	60	55	91.67	37	33	89.19	23	22	95.65
20—24 ..	73	70	95.89	37	35	94.59	36	35	97.22
25—29 ..	60	58	96.67	44	44	100	16	14	87.50
30—34 ..	51	50	98.04	24	24	100	27	26	96.30
35—39 ..	41	41	100	23	23	100	18	18	100
40—44 ..	37	37	100	17	17	100	20	20	100
45—49 ..	23	23	100	15	15	100	8	8	100
50—54 ..	22	22	100	15	15	100	7	7	100
55—59 ..	10	9	90	7	7	100	3	2	66.67
60—64 ..	15	15	100	5	5	100	10	10	100
65 ..	11	11	100	4	4	100	7	7	100

APPENDIX VII

MENTAL HOSPITAL

1. The overcrowding previously reported continued throughout the year. The first Mental Hospital in Suva was apparently opened in the year 1896 and was located near the present site. Fifteen patients were then recorded. The first ward of the present hospital was built in 1913 and records show 31 patients were present. During the 1920's the average patient population increased to 69 and rose to 80 in the 1930's. Since then the hospital has been overcrowded as it is designed to accommodate only 80 patients. By 1950 the population reached 94 patients and in that year the orderlies were increased from 17 to 19. For the past two years the average number of patients has been 139. This means that many must be accommodated on verandahs even during inclement weather.

2. Pending approval of an additional building a policy of early discharge on trial has been adopted whenever possible. In spite of this the present overcrowding of patients on verandahs requires additional constant supervision. Fifty-one cases were allowed out on trial in 1954 bringing the total number out on trial up to 101.

3. Details of staff are as follows:—

Medical Superintendent	2 Female Fijian Orderlies
Head Attendant	6 Male Fijian Orderlies
Assistant Attendant	5 Male Samoan Orderlies
6 Female Samoan Orderlies	2 Male Indian Cooks.

4. The following table shows admissions and discharges for 1954:—

Remaining in hospital at end of 1953	..	..	..	139	
Admitted during 1954	..	..	..	61	
				—	200
Discharged during 1954	..	..	..	2	
Absent on trial during 1954	..	..	..	51	
Died in institution during 1954	..	..	..	8	
Remaining in hospital at end of 1954	..	..	..	139	
				—	200



5. The following table shows the length of time of residence of the patients remaining in the Mental Hospital at the end of 1954:—

Number of Years				Males	Females	Total
0 to 1 years	..	..	..	21	17	38
1 to 5 years	..	..	..	28	19	47
5 to 10 years	..	..	..	10	12	22
10 to 15 years	..	..	..	4	4	8
15 to 20 years	..	..	..	10	3	13
20 to 25 years	..	..	..	2	4	6
25 to 30 years	..	..	..	2	1	3
30 years and over	..	..	..	2	..	2
				79	60	139

6. The patients have been classified as follows:—

Classification				Number		Deaths
Manic depressive psychosis	..	..	..	50		1
Schizophrenia	..	..	..	103		1
Amentia	..	..	..	10		1
Epilepsy	..	..	..	11		2
Senility	..	..	..	22		3
Spastic diplegia	..	..	..	2		.
Alcoholism	..	..	..	1		.
Involutional Melancholia	..	..	..	1		.
				200		8

7. The percentage racial distribution and sex of patients is as follows:—

				Males	Females	Total	Percentage
Europeans	..	..	..	13	5	18	9
Fijians	..	..	..	25	18	43	21.5
Indians	..	..	..	62	63	125	62.5
Others	..	..	..	10	4	14	7.0

8. The deaths which occurred at the institution were from the following causes and in the following classes:—

General Condition				Cause	
Senile Dementia	..	..	..	Myocarditis.	
Senile Dementia	..	..	..	Cerebrovascular haemorrhage	
Senile Dementia	..	..	..	Lobar pneumonia	
Epileptic	..	..	..	Status epilepticus	
Epileptic	..	..	..	Broncho pneumonia	
Schizophrenia	..	..	..	Cardiac failure	
Mental defective	..	..	..	Asphyxia due to hanging	
Manic depressive	..	..	..	Asphyxia due to hanging.	

9. The following table shows the nationality and sex of the various patients:—

			Europeans		Fijians		Indians		Others		Total		Total
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
Remaining at end of 1953	..	..	9	3	20	14	42	40	7	4	78	61	139
Admitted during 1954	..	..	4	2	5	3	20	24	3	..	32	29	61
													200
Absent on trial during 1954	..	..	3	1	7	8	14	16	2	..	26	25	51
Discharged in 1954	..	..	1	..	..	..	..	1	..	..	1	1	2
Died during 1954	..	..	1	..	2	1	2	2	..	..	5	3	8
Remaining at end of 1954	..	..	8	4	18	8	45	43	8	4	79	60	139
													200
Total number absent on trial including those absent on trial during 1954	..	..	3	4	12	15	29	26	2	..	46	45	101

10. A new electro-convulsive machine was acquired and 56 patients received treatments.

11. Visits were paid by the Board of Visitors on 1st April, 1954, 24th June, 23rd September, 1954. The December meeting was held on the 13th January, 1955.

12. Gifts to the institution were made as follows:—

- Mr. and Mrs. Sahu Khan, sweets and Indian pudding to each patient.
- Dr. Williams, a parcel to each patient consisting of sweets, tooth brush, scent and soap.
- Mrs. Bernard and Dr. Williams, soft drinks, sandwiches and cakes to each patient.
- Mr. Miller (British Council), screening of films.
- St. Andrew's Presbyterian Xmas Cheer Fund, canned fruit, juices and sweets to each patient.
- M. Ali Uddan, a sack of mangoes, water melons and sweets for all the patients on Xmas day.
- Messrs. Lalji and Magee, Indian sweet meat to all patients.

## APPENDIX VIII (a)

## FIJI LEPROSY HOSPITAL, MAKOGAI

1. *Staff Changes*—Dr. W. H. McDonald, Medical Superintendent proceeded on overseas leave on 31st May.

Dr. D. Keating-Clay acted as Medical Superintendent from 16th June to 28th December, 1954.

Sister Mary Hilda who had been Sister-in-Charge since 1948, and Sister Mary Gabrielle, stationed at Makogai since 1936, went on leave on 31st May prior to resignation. The latter has joined Sister Mary Suzanne at her laboratory in France and is continuing her work on leprosy there.

Sister Mary Felicitas assumed duty as Sister-in-Charge when Sister Mary Hilda departed from Makogai.

Five Sisters joined the staff from overseas: Sister M. Prisca, Sister M. Valentine, Sister M. Carmel, Sister M. Alcime, Sister M. Rosaire, while Sister M. Gianclaudia for reasons of ill-health, did not continue her service at Makogai, and Sister M. Paulita who left on 18th October was replaced by Sister M. Henry from Suva.

2. *Teaching*—Assistant Medical Practitioners I. Kaisala and F. Pine from Gilbert and Ellice Islands, and Assistant Medical Practitioner Macu Salato from Fiji undertook a refresher course on leprosy, while students from the Central Medical School came in turn to learn something of the disease and its treatment.

## 3. Daily average for the Different Administrations—

		1952		1953		1954	
New Zealand—							
European..	..	1.00		0.54		0.49	
Chinese ..	..	0.46		1.00		1.0	
Samoan ..	..	1.00		0.34		....	
Niue ..	..	1.00		1.00		0.66	
		————	3.46	————	3.88	———— 2.15	
Western Samoa—							
Euronesian	..	9.53		8.36		7.43	
Chinese ..	..	1.00		1.00		1.0	
Melanesian	..	1.00		0.36		....	
Samoan ..	..	60.78		59.58		55.41	
		————	72.31	————	69.30	———— 63.84	
American Samoa—	..						
Euronesian	..	3.00		2.24		....	
Samoan ..	..	26.67		16.57		....	
		————	29.67	————	18.81	———— ....	
Cook Islands—							
Euronesian	..	0.96		....		....	
Cook Islanders	..	55.86		48.84		36.37	
Niue Islanders	..	5.00		5.00		5.0	
		————	61.82	————	53.84	———— 41.37	
Tonga—							
Tongan ..	..	32.07		32.78		27.79	
		————	32.07	————	32.78	———— 27.79	
Gilbert Islands—							
European..	..	1.00		1.00		1.0	
Euronesian	..	2.00		2.41		3.0	
Chinese ..	..	1.00		1.00		1.0	
Gilbert Islanders	..	76.27		92.58		108.46	
		————	80.27	————	96.99	———— 113.46	
Fiji—							
European..	..	1.00		1.00		1.0	
Euronesian	..	4.90		5.00		5.93	
Chinese ..	..	3.00		3.87		4.36	
Melanesian	..	20.90		21.71		21.64	
Rotuman ..	..	10.36		12.64		15.7	
Samoan ..	..	1.00		1.00		1.0	
Banaban ..	..	10.60		12.37		10.71	
Indian ..	..	227.05		224.56		210.89	
Fijian ..	..	132.29		129.32		137.84	
		————	411.10	————	411.47	———— 409.07	
			690.70		686.07		657.68



4. *Statistics*—The average daily number of patients was 657.68 of which 398.26 (excluding Banabans) represented patients from within the Colony of Fiji.

TABLE I

STATISTICS FOR THE YEAR, 1954

	Euro- pean		Euro- nesian		Solomon Islanders		Fijian		Indian		Chinese		Rotuman		Samoan		Niue Islanders		Cook Islanders		Tongan		Bana- ban		Gilbert Islanders		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
In Hospital 1/1/54	1	1	10	6	11	11	84	47	168	58	7	..	8	6	35	23	3	3	25	16	19	10	8	3	62	39	441	223	664
Admissions	..	..	2	1	2	1	11	8	12	1	1	..	1	1	..	..	..	..	..	..	5	1	..	..	7	3	41	16	57
Deaths	..	..	..	..	2	1	..	..	2	1	..	..	..	..	..	..	1	1	1	..	..	..	..	..	1	..	6	2	8
Discharges	..	..	2	..	1	1	4	6	24	8	1	..	..	..	1	2	..	..	4	2	2	2	1	..	2	2	42	28	65
Unconditional Discharges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Inmates—31/12/54	1	1	10	7	10	11	91	49	154	49	7	..	9	7	34	21	3	2	20	14	22	9	7	3	66	40	434	213	647
Totals	2	17	21	140	203	7	16	55	34	31	10	647																	

The proportions of the main racial groups at the end of 1954 were:—

Indians	.. ..	31 per cent	Samoans	.. ..	8 per cent
Fijians	.. ..	22 per cent	Cook Islanders	.. ..	5 per cent
Gilbert Islanders (including Banabans)		18 per cent	Tongans	.. ..	5 per cent

TABLE II—1954

			T-1		T-2		T-3		L-1		L-2		L-3		Totals			
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
European	..	..	..	..	..	..	1	1	..	..	..	..	1	1	2			
Euronesian	..	..	..	1	..	1	2	2	8	2	..	..	10	6	16			
Fijian	..	..	2	4	15	20	4	3	22	8	33	19	10	..	86	54	140	
Solomon Islanders	..	..	..	3	3	2	2	..	4	1	2	3	2	3	13	12	25	
Samoan	..	..	..	1	1	4	1	..	9	9	19	10	2	1	35	23	58	
Rotuman	..	..	..	1	..	..	..	..	1	4	7	2	..	1	9	7	16	
Cook Islanders	..	..	..	6	1	1	2	..	..	5	4	12	9	1	..	25	16	41
Niue Islanders	..	..	..	1	1	..	..	..	1	1	..	1	1	..	3	3	6	
Gilbert Islanders	..	..	..	8	6	10	5	1	..	10	11	42	23	5	..	76	45	121
Tongan	..	..	..	1	..	2	3	4	1	6	3	6	3	..	..	19	10	29
Chinese	..	..	..	1	..	1	..	..	..	1	..	4	..	..	..	7	..	7
Indian	..	..	..	15	5	15	5	..	1	60	18	81	27	..	..	171	56	227
Totals	..	..	36	21	51	39	11	7	122	62	214	99	21	5	455	233	688	
			57		90		18		184		313		26		688			
			165						523									

	1952	1953	1954
Lepromatous—Per cent			
Gilbert Islanders	.. 75 per cent	84·2 per cent	75 per cent
Indians	.. 75 per cent	74·3 per cent	83 per cent
Samoans	.. 74 per cent	74·4 per cent	86 per cent
Fijians	.. 62 per cent	54·4 per cent	66 per cent
Cook Islanders	.. 59 per cent	52·5 per cent	....
Totals	.. 70 per cent	68 per cent	76 per cent
Males	.. 74 per cent	70 per cent	78 per cent
Females	.. 76 per cent	64 per cent	71 per cent

The 688 patients classified in Tables II, III and IV include those who died or were discharged during the year but not, following the custom of previous years, those admitted during the latter half of the year.

PROGRESS TABLE III—1954

	Arres- ted		Quie- scent		Im- proved		Station- ary		Worse		Died		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
European .. ..	1	..	..	..	..	1	..	..	..	..	..	..	1	1	2
Euronesian . . .	2	..	..	..	5	4	3	2	..	..	..	..	10	6	16
Fijian .. ..	11	5	4	3	56	24	12	19	3	3	..	..	86	54	140
Solomon Islanders..	1	1	1	1	2	6	6	3	1	1	2	..	13	12	25
Samoan .. ..	4	2	1	..	15	12	13	9	2	..	..	..	35	23	58
Rotuman .. ..	..	..	..	..	5	7	4	..	..	..	..	..	9	7	16
Cook Islanders ..	6	2	..	..	11	11	6	3	1	..	1	..	25	16	41
Niue Islanders ..	..	1	1	..	..	..	2	1	..	..	..	1	3	3	6
Gilbert and Ellice Islanders	3	2	5	2	35	19	29	20	3	2	1	..	76	45	121
Tongan .. ..	3	2	..	2	9	1	7	5	..	..	..	..	19	10	29
Chinese .. ..	1	..	1	..	3	..	2	..	..	..	..	..	7	..	7
Indian .. ..	28	8	6	2	84	26	46	19	5	..	2	1	171	56	227
Totals ..	60	23	19	10	225	111	130	81	15	6	6	2	455	233	688
	83		29		336		211		21		8		688		
	448								240						

Total—Arrested, Quiescent and Improved—Per cent—

	1953	1954
Males	.. 52 per cent	52 per cent
Females	.. 57 per cent	57 per cent
Gilbert Islanders	.. 53 per cent	55 per cent
Indians	.. 55 per cent	68 per cent
Samoans	.. 45 per cent	57 per cent
Fijians	.. 42 per cent	73 per cent
Cook Islanders	.. 69 per cent	....



TABLE IV—1954

				T-1	T-2	T-3	L-1	L-2	L-3	Totals
Arrested	..	..	..	25	12	5	39	2	..	83
Quiescent	..	..	..	5	8	4	11	1	..	29
Improved	..	..	..	11	45	3	55	200	22	336
Stationary	..	..	..	14	16	6	73	98	4	211
Worse	..	..	..	1	7	..	8	5	..	21
Died	..	..	..	1	2	..	2	3	..	8
Totals				57	90	18	188	309	26	688

The proportion of cases recorded as “stationary” has decreased as compared with the figures of 1953, more particularly Lepromatous II cases.

5. *Treatment*—Ninety-nine of the patients have received treatment with a Sulphone derivative, particularly Diamino Di-Phenyl Sulphone by mouth, for whole or part of the year. Thiacetazone was retained for use in a few instances but at the end of the year nearly all the patients were receiving D.D.S. The dosage of D.D.S. was revised and a maximum dosage of 0.4 gm. twice weekly was given. The previous regime of maximal dosage of 0.2 gm. daily with one week’s rest in four was replaced by this dosage of 0.4 gm. twice weekly without any “rest week”.

6. *Tuberculosis*—Of the 35 cases of notified tuberculosis, only nine are active. Two cases were included amongst those discharged during the year. No deaths from tuberculosis occurred. Forty cases are being watched for further development. The active cases have been treated with a combination of Streptomycin, P.A.S. and Iso-nicotonic hydrazide.

The total number of X-ray examinations, including all films taken, was 408—

Chest	..	..	..	..	..	240
Bones	..	..	..	..	..	105
Dental	..	..	..	..	..	27
Others	..	..	..	..	..	36

7. *Dental Treatment*—Ratu Vosailagi of the Dental Division visited during the year and arrangements were made for a second visit to be made by other officers of the Dental Division to undertake the preparation of dentures. The two Sisters partially trained in dentistry at the Central Medical School continued to render invaluable service.

DEATHS 1954

8. Two striking facts may be noted regarding the deaths during the year—first, that eight is the lowest number recorded at Makogai since 1920, when the total number of patients was only 244, and secondly, that no deaths as in 1952 and 1953 were due to tuberculosis in any form.

9. It is interesting to record the following figures of Admissions, Discharges and Deaths between 1948 and 1954, 1948 marking the end of the “pre-sulphone” era.

					Admissions	Discharges	Deaths
1948	..	..	..	..	73	52	40
1949	..	..	..	..	92	48	40
1950	..	..	..	..	80	37	30
1951	..	..	..	..	113	83	24
1952	..	..	..	..	70	57	13
1953	..	..	..	..	104	84	11
1954	..	..	..	..	57	66	8

10. Of the 57 admissions in 1954, seven were re-admissions but of these seven, two did not show any signs of reactivity.

11. While in 1948 only 3 of the 52 discharged were lepromatous cases, 24 of 65 discharged in 1954 were lepromatous; of the latter 65, 6 were re-admissions discharged once again. The decrease in deaths each year is also interesting.

12. In 1948, the 52 discharged patients, mostly T-1 and T-2 cases had been resident at Makogai for periods ranging from 2 years to 10 years—this excludes the re-admissions. In 1954 the 65 patients who left Makogai had been there for periods ranging from 1½ years to 27 years and the 24 lepromatous cases had received treatment with Sulphones for 4 or 5 years: these 24 cases on the average, had been at Makogai for 10 years with extremes of 23 years and 4 years.

DEATHS—1954

				T-1		T-2		L-1		L-2		L-3		Totals		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Indian	..	..	..	..	..	1	..	..	..	1	1	..	..	2	1	3
Niue Island	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1
Solomon Islanders	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	2
Cook Islanders	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Gilbert Islanders	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1
Totals				1	..	3	..	..	..	1	2	1	..	6*	2	8
				1		3		..		3		1		8		

The causes were:—

					1952	1953	1954
Uraemia and Chronic Nephritis	..	..			4	4	.
Amyloidosis	.	..	..	..	2	1	.
Bronchiectasis	..	..	..	..	.	1	.
Broncho-pneumonia	..	..	..	..	.	1	1
Cardiac failure	..	..	..	..	1	2	2
Coronary Thrombosis and infarction	..				1	1	2
Cerebral Haemorrhage	..	..	..	..	.	1	1
Advanced Leprosy	.	..	..	..	2	.	.
Septic Osteomyelitis	..	..	..	..	1	.	.
Haematemesis	..	..	..	..	1	.	.
Cerebellar Abscess	..	..	..	..	1	.	.
Carcinoma	..	..	..	..	.	.	2
Total	..	..			13	11	8

13. *Use of "Chauvire" Antigen*—During the year a trial was commenced with the "Chaurvire" Antigen or Antigen Marianum, a new product produced by Sister Mary Suzanne at the Laboratoire de Recherches sur la lepre at Lyon. Sister Mary Suzanne was one of the members of the staff of the earlier days of Makogai. The trial continues.

14. *Filariasis*—Blood smears were examined for microfilaria:—  
of 700 examinations, 155 were positive, i.e. 22 per cent  
of 75 from Fijian men, 26 were positive 35 per cent  
of 159 from Indian men, 38 were positive: 24 per cent  
of 32 from Samoan men, 14 were positive: 44 per cent

This investigation continues.

TABLE V—ADMISSIONS 1954

				N-L		T-1		T-2		T-3		L-1		L-2		L-3		Totals		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Fijians	..	..	..	..	1	..	1	3	1	..	1	1	..	5	5	..	..	9	9	18
Indians	..	..	..	..	..	3	1	1	..	..	..	2	..	5	..	..	..	11	1	12
Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Euronasian	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..	2	1	3
Rotumans	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	2
Tongans	..	..	..	..	..	..	..	1	..	..	..	..	..	3	1	1	..	5	1	6
Gilbert Islanders	..	..	..	..	..	..	..	1	2	..	..	5	1	1	..	..	..	7	3	10
Chinese	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Solomon Islanders	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
Totals	..	..	..	..	1	3	2	7	4	..	1	9	1	17	7	1	..	37	16	53
				1		5		11		1		10		24		1		53		

This figure excludes the four absent without leave at the beginning of the year and shows only true admissions.

DISCHARGES 1954

				Uncond.		T-1		T-2		T-3		L-1		L-2		L-3		Totals		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Fijians	..	..	..	..	..	..	1	2	4	1	..	..	1	1	..	..	..	4	6	10
Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Euronesians	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	..	2
Solomon Islanders	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1	2
Indians	..	..	..	..	1	5	4	9	2	..	..	3	..	8	1	..	..	25	8	33
Samoans	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	1	2	3
Cook Islanders	..	..	..	..	..	1	..	2	1	..	..	1	1	..	..	..	..	4	2	6
Tongans	..	..	..	..	..	..	..	1	1	..	1	..	..	1	..	..	..	2	2	4
Gilbert Islanders	..	..	..	..	..	2	2	..	..	..	1	..	..	..	..	..	..	3	2	5
Chinese	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Totals	..	..	..	..	1	9	7	14	8	3	..	7	3	10	4	..	..	43	23	66
				1		16		22		3		10		14		..		66		



INJECTIONS														LABORATORY EXAMINATIONS															
Sol. Ant. T. and Autohaem. K:	V.BI:B2:B12: and Calc. Gluc.	Sulphetrone	Penicillin	Insulin	Liver	Leprosin and Mantoux	Anti-Typhoid and Tetanus T.	Marianum	Streptomycin	Various	Totals for Injections	Dressings	Patients Dressed	Pneumothorax	Physiotherapy	X-rays	Dental	Operations	Biopsy	Post-Mortem	Bacterial Examination	Helminths	Urine analysis	Blood Counts	Fresh Blood Examination	B.S.R.	H.B. per cent	Total for Lab. Examination	Visitors
January ..	44	125	134	33	47	10	..	..	..	24	418	4,131	2,771	15	..	61	33	1	..	1	343	32	116	16	9	18	511	1,045	5
February ..	31	52	113	36	57	21	38	..	56	37	969	4,800	3,280	8	..	63	24	..	1	..	376	20	154	3	..	2	233	788	3
March ..	52	54	254	32	115	9	10	..	62	60	648	4,276	3,004	8	..	52	..	2	2	..	671	36	180	4	513	2	249	1,655	..
April ..	76	39	269	60	111	7	37	..	..	177	776	3,876	2,464	8	..	8	19	3	..	..	376	19	145	9	32	15	332	888	4
May ..	48	79	233	50	99	..	3	..	..	53	682	5,024	3,672	7	..	5	22	12	3	..	256	2	132	6	8	2	404	810	39
June ..	24	41	240	29	95	3	13	..	10	61	516	3,876	2,856	..	..	15	21	..	..	2	444	60	102	15	50	4	154	869	6
July ..	22	435	331	139	62	294	31	..	26	23	1,418	4,734	3,726	..	11	..	14	..	..	..	344	86	136	59	23	20	472	1,140	31
August ..	38	357	343	140	61	218	243	55	21	25	1,501	4,607	3,536	..	300	49	35	..	..	..	194	..	133	16	6	30	147	526	1
September ..	12	97	328	122	..	29	20	55	51	17	731	4,122	5,760	..	353	10	23	..	..	..	100	1	102	4	2	..	29	238	5
October ..	46	164	131	98	..	45	243	55	193	23	1,081	3,125	3,978	..	360	37	25	..	..	..	200	16	96	3	3	2	210	530	4
November ..	17	136	114	91	..	118	21	68	97	60	722	4,454	3,654	..	362	54	22	..	..	..	373	4	26	1	5	..	469	878	1
December ..	63	121	27	145	..	74	10	69	124	68	701	4,991	3,653	..	380	50	21	..	..	..	277	17	29	32	8	7	139	509	17
	473	1,700	2,517	975	647	828	720	302	640	628	10,100	52,016	42,354	46	1,766	404	259	18	6	3	3,854	293	1,451	168	659	102	3,349	9,876	116

SUMMARY OF STATISTICS—1911–1954

	Europeans.	Euronesians.	Solomon Islanders.	Fijians.	Indians.	Chinese.	Rotumans.	Samoans.	Niue Islanders.	Cook Islanders.	Tongan.	Banabans.	Gilbert Islanders	Maoris.	Total.
Admissions .. ..	23	56	222	937	1,417	29	110	150	15	280	75	13	239	4	3,576
Repatriations .. ..	1	3	..	..	435	..	..	22	..	..	..	..	..	..	461
Discharges .. ..	6	21	72	404	448	7	57	43	2	176	27	3	52	1	1,319
Deaths .. ..	14	15	129	395	331	15	37	34	8	70	17	..	81	3	1,149
Inmates 31/12/54 ..	2	17	21	140	203	7	16	55	5	34	31	10	106	..	647

RAINFALL—1954

Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1954	14.62	8.08	9.11	14.88	1.06	12.85	2.86	3.51	3.11	4.71	16.53	5.19	96.51

APPENDIX VIII (b)

LEPER SUB-STATION, KOROVOU, SUVA

1. Discharged cases from Makogai housed until transport arranged to their various destinations in and outside the Colony:—

	Male	Female	Total
Fijians .. ..	3	5	8
Indians .. ..	24	7	31
Tongans .. ..	2	2	4
Gilbertese .. ..	3	2	5
Cook Islanders .. ..	4	2	6
Samoans .. ..	1	1	2
Solomon Islanders .. ..	1	1	2
Chinese .. ..	1	..	1
Part-Europeans .. ..	3	..	3
	42	21	63

2. Patients housed pending removal to Makogai—

Fijians .. ..	6	7	13
Indians .. ..	11	..	11
Chinese .. ..	1	..	1
Rotuman .. ..	1	1	2
Solomon Islanders .. ..	2	..	2
Samoans .. ..	..	1	1
Part-Europeans .. ..	1	..	1
	22	9	31

3. Patients for examination housed during the year—

Fijians .. ..	7	1	8
Indians .. ..	6	1	7
Solomon Islanders .. ..	1	..	1
	14	2	16

4. Discharged patients from Suva Rural and Urban attending during 1954—

Suva Urban . ..	8	2	10
Suva Rural .. ..	2	2	4
	10	4	14



## E OF INVESTIGATIONS CARRIED OUT IN

Faeces—

1. Histology—					
Material from biopsies, etc.	..	..	..	..	423
autopsies	..	..	..	..	319
Animal tissues	..	..	..	..	7
Skin (Leprosy)	..	..	..	..	4
2. Haematology—					
Blood counts—					
White cell counts	..	..	..	..	2,502
Differential counts	..	..	..	..	2,244
Red cell counts	..	..	..	..	1,658
Haemoglobin estimations	..	..	..	..	3,751
Haematocrit readings	..	..	..	..	189
Blood sedimentation rates	..	..	..	..	1,070
Blood grouping	..	..	..	..	726
Pretransfusion cross matching	..	..	..	..	128
Donors bled for transfusion	..	..	..	..	128
Rh grouping	..	..	..	..	13
Reticulocyte counts	..	..	..	..	478
Marrow smears	..	..	..	..	116
Bleeding time	..	..	..	..	13
Coagulation time	..	..	..	..	20
Platelet counts	..	..	..	..	14
Prothrombin time	..	..	..	..	22
3. Seminal Fluids—					
Examinations for fertility tests	..	..	..	..	28
4. Parasitology—					
Faeces—					
Examinations for cysts and ova	..	..	..	..	6,602
amoebae	..	..	..	..	178
Blood—					
Films for malaria	..	..	..	..	68
Microfilariae	..	..	..	..	337
5. Bacteriology—					
Microscopic examinations—					
Vaginal, urethral and cervical smears	..	..	..	..	754
Sputum	..	..	..	..	899
Stools for M tuberculosis	..	..	..	..	99
Urine for M tuberculosis	..	..	..	..	97
Skin lesions for M leprae	..	..	..	..	331
fungus	..	..	..	..	66
Miscellaneous exudates pus, etc.	..	..	..	..	276
Mantoux tests	..	..	..	..	10
Cultures—					
Gastric washings for M tuberculosis	..	..	..	..	306
Sputum washings for M tuberculosis	..	..	..	..	13
Faeces	..	..	..	..	62
Urine	..	..	..	..	39
Blood	..	..	..	..	113
Throat swabs	..	..	..	..	145
Conjunctival swabs	..	..	..	..	21
Cerebro spinal fluids	..	..	..	..	296
Bacteriological examination of water, etc.—					
Drinking water supplies	..	..	..	..	157
Milk	..	..	..	..	5
Ice cream	..	..	..	..	15
Aerated water	..	..	..	..	6
Various	..	..	..	..	23
Dark field examinations for treponemata	..	..	..	..	13
6. Serology—					
Agglutination tests—					
For typhoid and paratyphoid	..	..	..	..	196
Brucellosis infections	..	..	..	..	37
Kahn reactions	..	..	..	..	1,473
7. Vaccines prepared—					
T.A.B. 50 c.c. bottles	..	..	..	..	1,115
Autogenous vaccines	..	..	..	..	29
8. Biochemistry—					
Estimations in blood—					
Sugar	..	..	..	..	226
Nonprotein nitrogen and Urea	..	..	..	..	293
Cholestrol	..	..	..	..	16
Estimations in Serum—					
Van den Bergh reactions	..	..	..	..	125
Icterus Index	..	..	..	..	21
Calcium	..	..	..	..	5
Proteins	..	..	..	..	92
Alkaline phosphatase	..	..	..	..	105
Takata ara reactions	..	..	..	..	3
Thymol turbidity	..	..	..	..	98
Bilirubin	..	..	..	..	104
Urines—					
Routine and microscopic examinations	..	..	..	..	2,401
Excretion of ascorbic acid	..	..	..	..	735
Estimation of sugar	..	..	..	..	40
Cerebro-spinal fluids—					
Cytology	..	..	..	..	296
Protein	..	..	..	..	227
Sugar	..	..	..	..	171
Chlorides	..	..	..	..	172

Faeces—						
Occult blood	..	..	..	..	..	105
Fat estimation	..	..	..	..	..	12
Functional tests—						
Fractional test meals		..	..	..	..	79
Urea clearance	..	..	..	..	..	5
Urca range	..	..	..	..	..	45
Glucose tolerance	..	..	..	..	..	64
Water balance	..	..	..	..	..	14
9. Animal Inoculations—						
Toads for pregnancy tests	..	..	..	..	..	143
Guinea pigs, tuberculosis and leptospira	..	..			..	10
10. Rats for Plague—Negative						
11. Forensic Medicine (other than autopsies)	..	..				53
Clothing for stains	..	..	..	..	..	3
Weapons for stains	..	..	..	..	..	2
Smears for spermatozoa	..	..	..	..	..	7
12. Postmortem Examinations—						
Colonial War Memorial Hospital	..	..	..	..	..	65
Maternity Annex	..	..	..	..	..	22
Tamavua Hospital	..	..	..	..	..	4
Mental Hospital	..	..	..	..	..	2
Police	..	..	..	..	..	39
Others	..	..	..	..	..	1

33,439

## BRANCH LABORATORY LAUTOKA

13. Haematology—						
Blood counts—						
White cells counts .. .. .	..	..	..	..	808	
Differential counts . . . . .	..	..	..	..	292	
Red cell counts . . . . .	..	..	..	..	792	
Haemoglobin estimations . . . . .	..	..	..	..	5,900	
Blood sedimentation rates . . . . .	..	..	..	..	934	
Blood grouping . . . . .	..	..	..	..	425	
Donors bled for transfusion.. . . .	..	..	..	..	83	
Haematocrit readings . . . . .	..	..	..	..	77	
Bleeding time . . . . .	..	..	..	..	3	
Clotting time . . . . .	..	..	..	..	3	
14. Parasitology—						
Faeces—						
Examinations for cysts and ova . . . . .	..	..	..	..	1,130	
amoebae and cells . . . . .	..	..	..	..	264	
Blood—						
Films for malaria . . . . .	..	..	..	..	18	
Microfilariae . . . . .	..	..	..	..	45	
15. Bacteriology—						
Microscopic examination—						
Urethral and cervical smears . . . . .	..	..	..	..	257	
Sputum . . . . .	..	..	..	..	980	
Stool for T.B. . . . .	..	..	..	..	10	
C.S.F. . . . .	..	..	..	..	146	
Skin and nasal smear for leprosy . . . . .	..	..	..	..	56	
Skin scrapings. Fungus . . . . .	..	..	..	..	33	
Miscellaneous exudates, pus, etc. . . . .	..	..	..	..	178	
Cultures—						
Stools . . . . .	..	..	..	..	78	
Blood . . . . .	..	..	..	..	23	
Throat swabs . . . . .	..	..	..	..	93	
Eye swabs . . . . .	..	..	..	..	24	
16. Serology—						
Agglutination tests—						
For typhoid, etc. . . . .	..	..	..	..	17	
Brucellosis infections . . . . .	..	..	..	..	3	
17. Biochemistry—						
Estimations in blood—						
Sugar . . . . .	..	..	..	..	128	
Urea . . . . .	..	..	..	..	128	
Estimations in Serum—						
Van den Bergh . . . . .	..	..	..	..	56	
Protein . . . . .	..	..	..	..	25	
Urine—						
Routine . . . . .	..	..	..	..	1,390	
Bile . . . . .	..	..	..	..	49	
Cerebro-spinal fluids—						
Protein . . . . .	..	..	..	..	64	
Chlorides . . . . .	..	..	..	..	66	
Sugar . . . . .	..	..	..	..	37	
Faeces—Occult blood, etc. . . . .	..	..	..	..	46	
Functional tests—						
Glucose tolerance tests . . . . .	..	..	..	..	13	
Fractional test meals . . . . .	..	..	..	..	35	
Animal inoculations—						
Toad for pregnancy tests . . . . .	..	..	..	..	91	
					14,832	

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18. *Kahn reactions*—Number 1,473. The results showed the usual racial differences—

Total	Sera	Strong positive	Postive	Doubtful	C.S.F.	Postiive
Fijians .. .. .	196	18	39	17	12	5
Indians .. .. .	946	24	47	39	20	2
Europeans .. .. .	211	....	3	4	1	..
Others .. .. .	87	6	11	3	..	..
	1,440	48	100	63	33	7

19. *Stools*—The total number of microscopic examination for parasites was 6,780.

The rate of infestation found was as follows:—

*Helminths*—

Ova of ankylostomes .. .. .	1,364 or 20 per cent
Ascaris lumbricoides .. .. .	409 or 6 per cent
Trichuris trichiura . .. .	110

*Protozoa*—

Living Ent histolytica .. .. .	4
Cysts of Ent histolytica .. .. .	5
Ent coli .. .. .	231
Giardia lamblia .. .. .	19
Iod. butschlii .. .. .	21

Specimens were mainly routine from troops, schools, nurses, etc., as well as patients and show a high incidence of infestation.

APPENDIX X

ANNUAL REPORT OF THE LEPROSY, V.D., AND YAWS CLINIC FOR THE YEAR—1954  
HEALTH OFFICE, SUVA

1. The clinic is situated behind the Health Office, Rodwell Road, Suva, opposite the Government Pharmacy. It contains two examining rooms, office, two toilets and a waiting room. Treatments, examinations, smears for Hansens disease, blood for Kahn's test and injections are carried out.

2. *Staff*—One Assistant Medical Practitioner assisted by a staff nurse.

3. *Gonorrhoea*—Almost all cases were treated with penicillin. Only a few cases were treated with a combination of penicillin and sulphathiazole. One or two cases reported as having relapsed, otherwise there has been no complication observed of a serious nature which demanded hospital treatment. With modern early treatment, admission to hospital is unnecessary.

Almost all contacts were traced, investigated and treated as required. Incidence for five years showing increase and decrease of number of cases:—

1950 .. .. .	133 cases
1951 .. .. .	99 cases
1952 .. .. .	102 cases
1953 .. .. .	72 cases
1954 .. .. .	100 cases

Number of cases in Race group for year 1954:—

European ..	Male ..	2	Female ..	..
Indians ..	Male ..	26	Female ..	9
Fijians .. /	Male ..	31	Female ..	26
Others ..	Unclassified ..	6		
				Total .. 100 cases

4. *Ophthalmia Neonatorum*—Two cases were referred by the Child Welfare Sister. One of these was a Fijian infant and the other a part European infant. Both of these cases were admitted to the Colonial War Memorial Hospital for treatment.

5. *Syphilis*—Two cases were notified during the year and treated in the clinic. They were both male Indians with primary type . There were nine old cases treated during the year.



*Syphilis*—Incidence for five years showing increase and decrease of number of cases:—

1950	..	..	..	..	..	76 cases
1951	..	..	..	..	..	30 „
1952	..	..	..	..	..	31 „
1953	..	..	..	..	..	13 „
1954	..	..	..	..	..	2 „

6. *Leprosy*—Six cases were reported in Suva and the suburbs during this year. They consisted of—one Indian male, two Fijian males, two Rotuman males, and one Solomon Island female. Twenty-seven suspected cases were examined, four of these were non-infective and were returned to their homes. Three cases of recurrence were found in ex-patients during routine reviews. They were all sent to the Leprosy Hospital, Makogai. The examinations are carried out at the clinic and also at the Sub-Station, Korovou, Suva.

Upon discharge from Makogai each patient is regularly issued with the prescribed maintenance doses of sulphones. 164 patients received their issues during the year. 107 reviews were carried out and completed.

7. *Yaws*—Yaws is prevalent among the Fijian race. Some instances of Yaws were exhibited among other Island races living in the Suva area, namely, Solomon Islanders, Rotumans, and part Europeans who have married Fijian women or who have otherwise come in contact with infectious cases.

A total number of 1,886 cases were treated at the clinic.

## APPENDIX XI

### SUVA GAOL

1. During the year the following Medical Officers acted as Visiting Medical Officer to the prison:—

Dr. T. A. Doran, Dr. T. G. Hawley and Dr. G. Hallman.

A.M.P. Mahesh Prasad has been in charge of the Infirmary.

Regular visits were made to the prison and cases referred were examined and treated.

Prison buildings including the bakery and kitchen were regularly inspected and found to be satisfactory

All new prisoners who numbered 514 were examined on admission and those sentenced to terms of imprisonment exceeding one month also had a chest X-ray.

The usual sick parades were held in the main prison compound twice a day by the resident Assistant Medical Practitioner.

2. Thirty-seven patients were admitted to the Infirmary during the year and consisted of the following cases:—

Haemoptysis	..	..	2	Diarrhoea	..	..	..	1
Abscesses, boils	..	..	3	Influenza	..	..	..	30
Wounds	..	..	1					

One hundred and three cases of infectious diseases were notified during the year as below:—

Chicken Pox .	..	..	2	Pulmonary Tuberculosis ..	1
Gonorrhoea .	..	..	2	Yaws .. ..	1
Influenza ..	..	..	97	-	

The following 19 cases were transferred to the Colonial War Memorial Hospital:—

Anaemia	..	..	..	1	Fracture	..	..	..	1
Appendicitis	..	..	..	1	Pleurodynia	..	..	..	1
Chronic Gonorrhoea	..	..	..	1	Pleurisy	..	..	..	1
Dermatitis	..	..	..	1	Pyelitis	..	..	..	2
Epididymitis	..	..	..	1	Renal Calculus	..	..	..	1
Fistula-in-ano	..	..	..	1	Varicose Veins	..	..	..	1
For investigation	..	..	..	6					

Two cases of pulmonary tuberculosis were transferred to Tamavua Hospital.

Of seven cases referred for Mental examination one was found to be insane and was certified and transferred to the mental Hospital.

No case of leprosy was found among the prisoners or staff.

No deaths due to sickness or accident occurred in the prison.

No corporal punishment was inflicted and no judicial hanging took place during the year.

## APPENDIX XII

## MOSQUITO AND FILARIASIS CONTROL

## HETRAZAN EXPERIMENTS

1. The Hetrazan experiments commenced in 1952 in Beqa Island, Rewa Province, and in the Ra Province were extended and further check tests were made on the original positives in each area. These follow up checks were made 6 months, 12 months and 24 months after the original survey and first Hetrazan treatment.

2. *Beqa Island*—Given 50 milligrams three times daily for seven days with all positives at supplementary checks being re-treated with the same dosage.

The latest figures show:—

Initial m/f counts per 1 c.c.	At Start		After 6 months		After 12 months		After 24 months	
	No.	RPM	No.	RPM	No.	RPM	No.	RPM
0 ..	..	..	71	634	62	554	69	616
1—5 ..	19	170	23	205	32	286	17	152
6—10 ..	32	330	7	63	6	54	8	71
11—30 ..	10	89	10	89	9	80	12	107
31—50 ..	11	98	1	9	1	9	4	36
51—100 ..	30	268	..	0	2	18	2	18
100 ..	5	45	..	..	..	..	..	..
All positive blood cases	112	1,000	41	366	50	446	43	384
Average m/f count per 1 c.c. ..	39.82		2.875		4.26		4.80	

3. *Tailevu Province*—A further experiment was undertaken in Tailevu Province on 204 cases positive for microfilaria. The dosage was 50 milligrams three times a day for three days with a re check in 12 months.

Initial m/f count per 1 c.c.	At Start		After 12 months	
	No.	RPM	No.	RPM
0 ..	0	0	101	495
1—5 ..	47	230	35	172
6—10 ..	40	196	22	108
11—30 ..	65	319	28	137
31—50 ..	28	137	6	29
51—100 ..	19	93	8	39
100 ..	5	25	4	20
All positive blood cases ..	204	1,000	103	505
Average m/f count per 1 c.c. ..	23.39		11.14	

4. *Ra Province*—Given 50 milligrams only one day each month throughout at monthly intervals.

Initial m/f counts per 1 c.c. ..	At Start		After 6 months		After 12 months		After 24 months	
	No.	RPM	No.	RPM	No.	RPM	No.	RPM
0 ..	0	0	128	810	132	836	136	861
1—5 ..	75	474	29	184	25	158	21	133
6—10 ..	24	152	1	6	1	6	1	6
11—30 ..	41	260	..	..	..	..	..	..
31—50 ..	9	57	..	..	..	..	..	..
51—100 ..	9	57	..	..	..	..	..	..
100 ..	0	..	..	..	..	..	..	..
All positive blood cases ..	158	1,000	30	190	26	164	22	139
Average m/f count per 1 c.c. ..	13.55		0.32		0.38		0.44	

RPM = Rate per mille



5. *Lakeba Island: Lau Province*—All previous Hetrazan experiments were conducted only on cases positive for microfilaria and were mainly to ascertain the most effective dosage.

In April 1954, a survey was made of eight villages in Lakeba Island in the Lau Province. The whole population was blood tested for m/f and returned:—

	Males	Females	All Population
No. of Person Examined .. ..	740	842	1,582
Microfilaria Rate per mille of total population .. .. .	223	185	204

6. A count of wild mosquitoes captured inside the villages and at regular intervals in the adjacent land up to 100 yards from the village was made. After dissection percentage of infected mosquitoes was noted.

7. The whole population, whether negative or positive for microfilaria, was then placed on a course of Hetrazan with the dosage of 50 milligrams on one day per month. This dosage was found to be the most effective during the earlier experiments.

8. *Lakeba Island*—Before initial Treatment—

m/f Count per 1 c.c.	Before Treatment		
	No.	RPM	
0 .. .. .	0	0	Positives only.
1— 5 .. .. .	37	115	
6— 10 .. .. .	28	87	
11— 30 .. .. .	63	196	
31— 50 .. .. .	48	149	
51— 100 .. .. .	63	195	
101— 500 .. .. .	56	174	
501—1000 .. .. .	15	47	
1000 .. .. .	12	37	
Total positives .. ..	322	1,000	
Average m/f count .. ..	146.0		

RPM = Rate per mille.

9. In April 1955, the whole population will again be tested and comparisons made with the above figures. Another count of wild mosquitoes will also be made.

10. *Hetrazan Reactions*—Over 80 per cent of all persons treated with Hetrazan report suffering some form of mild reaction to the drug. These reactions are mainly headache; backache, fever, general malaise. Reactions do not persist for more than three days.

No patient has ever refused re-treatment. At Beqa Island and in Ra no person treated has reported a recurrent attack of filarial fever for twelve months.

11. *Training School*—During 1954 eight students completed the six months course of training provided in filariasis and mosquito control.

APPENDIX XIII

NUTRITION ACTIVITIES IN FIJI—1954

1. During the year, the supervision of hospital food services in Suva was undertaken by the Dietitian, Fiji Medical Service. All other nutrition activities, which included inspection of institutions, education and research were carried out by the Nutrition Section of the South Pacific Health Service.

2. *Food Service in Institutions*—This year a considerable amount of time has been spent in devising means for reducing the cost of rationing. Less expensive types of food of good nutritive value have been introduced, and kitchen efficiency has been increased. In addition, the Prisons Department has established a successful scheme for the bulk purchase of stores for institutions. This has already brought about considerable savings on numerous food items.

3. Costed ration scales have been prepared for the Education Department and some of the Hospitals, and these have been used as a basis for financial estimates. Advice on ration scales has been supplied to the Army and to Mission Schools.

4. *Nutrition Education*—Courses in nutrition and dietetics have been given to nurses at the Lautoka and Suva Nursing Schools. A course on diet therapy and public health nutrition was given to senior medical students.

5. A series of radio talks for Fijian and Indian women was started in November. These are prepared by the Education Department's Home Science Supervisor and the Nutritionist.



6. The first printed number of the pamphlet—*Tropical Food and Nutrition* appeared in June. Nearly 900 copies have been distributed in Fiji and other South Pacific Health Service territories. The second number was published in November.

7. A weekly food note on the nutritive value and use of tropical food has been prepared for the local press.

8. Notes on feeding Indian infants were prepared for limited distribution. These are to be translated into Hindi and printed by the Government Printer for large scale distribution.

9. *Research*—In May, a survey of economic conditions and nutritional status of poor Indian families was undertaken in conjunction with Miss O'Loughlin of the Australian National University who was invited to make a study of national income in Fiji.

10. The annual height and weight survey of Fijian children at two schools in Ovalau and Moturiki has continued. One of these schools started an excellent school lunch programme in February

11. It was encouraging to find that between February and November, the average per head gain in weight for 136 school children was nearly one pound greater than in 1953 when there was no regular lunch programme.

12. This school lunch scheme is organized by village women. Every day two women come from each village to cook vegetable and fish soup for the midday meal, which is supervised by one of the school masters. It is hoped that consideration might be given to putting this type of scheme into practice in schools throughout Fiji.

13. *Improvement in Food Supplies*—Experiments were carried out to see if the imported fresh-water-pond fish—*Tilapia mossambica* would be an acceptable food in Fiji. This fish has increased rapidly in several ponds. Plans are now being made to introduce fish farming at Queen Victoria Boys' School.

#### APPENDIX XIV (a)

##### CENTRAL MEDICAL SCHOOL

1. *Staff*—Fulltime staff consists of a Principal (Dr. A. R. Edmonds); Lectures in Anatomy and Surgery (Mr. K. J. Gilchrist, F.R.C.S., and A.M.P. Ram Singh); Science lecturer and two Dental Officers.

2. Part-time lecturers include the Surgeon Specialist, Physician Specialist, Pathologist, Ophthalmologist, Tuberculosis Specialist, and Medical Officers of the Colonial War Memorial Hospital, the Medical Officer of Health and members of the Health Department. Lectures in Nutrition are given by the Senior Nutritionist, South Pacific Health Service.

3. Three important developments occurred during the year. These were, the acceptance of recommendations regarding the future development of the school, the occupation of the new building at Tamavua, and the replacement of the former four year course by a five year medical course.

4. A Cambridge School Certificate is now required for all entrants from Fiji, and something at least approaching that standard in English, Mathematics and Science from other territories. Furthermore, in order to help those territories whose educational facilities are at present inadequate to meet the requirements, a preliminary class in the above mentioned subjects will commence in 1955. This preliminary course is experimental and it will take at least one year to decide whether it is sufficiently effective, or whether these students should receive longer and more formal education in high schools in Fiji or elsewhere.

5. The second half of 1954 saw a considerable increase in the amount of teaching which occurred in the clinical years. This was mainly due to the release of Mr. K. J. Gilchrist, F.R.C.S., from his surgical commitments in the hospital and his taking up full time teaching duties in Anatomy and Surgery, and the appointment of Dr. C. H. Gurd, to the vacant post of Physician Specialist. All three clinical years were fully occupied, both mornings and afternoons by lectures and classes in the hospital. This increased teaching time resulted in considerable benefit to the students doing their final year. This group was a large one and had previously suffered considerable changes in teaching personnel.

6. The Dental course, which was one of four years, has been reduced to three years. The standard of admission to this course, however, has been raised, so that students entering the course should be better fitted to cope with the subjects than previously. Furthermore, the subject of prosthetics has been removed from the dental course proper, and made a one year post-graduate course as the number of Assistant Dental Practitioners requiring this additional training in the territories is limited. There has been no actual reduction in the quality and extent of the subjects dealt with.

7. The administration and some of the teaching was transferred to the new building at Tamavua in May, 1954. Students have been domiciled in the living quarters since August. The students in ancillary courses live in flats adjacent to the school, and the old quarters behind the Colonial War Memorial Hospital are now occupied by resident Hospital Assistant Medical Practitioners and those undertaking post-graduate training at the hospital.



8. The following is an extract from the statistical data for 1954:—

	Medical	Dental
Number of students enrolled at the beginning of the year .. .. .	99	33
Admitted during the year .. .. .	1	..
	100	33
Discharged during the year .. .. .	2	2
Remaining at the end of year .. .. .	98	31
Graduated at the end of year . . . . .	30	12
Departed without graduating .. .. .	3	..
Remaining to repeat whole or part of final year ..	4	..
Sanitation, X-ray, Laboratory and Pharmacy Course ..	..	..
Students who lived in the School .. .. .	..	16
Post-graduate students registered during 1954 ..	..	6

9. The Medical and Dental students in the School were drawn from 11 territories apart from Fiji. The actual distribution of the various groups was as follows:—

Fijians (including Rotumans and Banabans) ..	39
Fiji Indians .. .. .	15
Cook Islanders . . . . .	10
Nauruans .. .. .	1
New Hebridians .. .. .	1
Western Samoans .. .. .	8
Eastern Samoans .. .. .	8
Tongans .. .. .	2
United States Trust Territories .. .. .	24
Solomon Islanders .. .. .	6
Gilbert and Ellice Islanders . . . . .	2
Papua-New Guinea Students .. .. .	10
Niue Islanders . . . . .	3
	129

10. The final year in Medicine contained 35 students, of whom 30 graduated, one was removed by his administration and four have been referred for further study. As will be seen above the whole of the final year in dentistry passed and graduated.

11. Every effort is being made to maintain and improve the general standard of Assistant Medical Practitioner graduates. The majority will be required to undertake village and district dispensary work in the territories. Many will also be solely responsible for preventing illness and promoting health in remote areas. At the same time graduates receive a sufficiently broad basic training to fit them for post-graduate training in specialised fields of medicine when the need arises.

12. A report on the Central Medical School would not be complete without reference to the valuable assistance received from Medical Officers, specialists and others in and outside the Medical Department. The teaching load imposed on many of these individuals who have full-time commitments in other fields is heavy and their devotion is greatly appreciated. The co-operation received in administrative and teaching facilities from the Medical Officer-in-Charge and staff of the Colonial War Memorial and Tamavua Hospitals has been invaluable.

#### APPENDIX XIV (b)

1. *Dental School*—The following territories were represented in the Dental School.

United States Trust Territory	Tonga
Eastern Samoa	Niue
Western Samoa	Cook Islands
Fiji (Fijian, Indian and Part-European)	

2. *Dental Health Education*—A series of radio talks under the auspices of the South Pacific Health Service was given by the Dental Hygienist. Two newspaper features were prepared and published in the local press in three languages. A dental health booklet was prepared, ready for publishing in 1955. The plan for Dental Health Education and toothbrush instruction in the schools has not yet commenced.

3. *School Dental Service*—Four afternoons of every week have been set aside for the treatment of school children, who attend by appointment from Suva schools. Because of the number of school children in Suva this service is not yet comprehensive.

4. As a test of dental conditions in outlying schools a survey was made by the Dental Hygienist and the Senior Dental Officer of a school on the islands of Ovalau and Moturiki.

5. The school and Pre-School Treatment Clinic in Rodwell Road was closed in May but its activities were absorbed by the Dental Clinic at the Colonial War Memorial Hospital.

6. *Dispensaries*—Extractions for the relief of pain are carried out by Assistant Medical Practitioners at their rural dispensaries.

7. Inspection of dental equipment in most of the dispensaries on Viti Levu was made early in the year by the Director of Medical Services and the Senior Dental Officer. Replacements were made as required.

APPENDIX XV  
NURSING DIVISION: 1954

1. *Nursing Service:* (State Registered)—

Nursing Superintendent .	1	Principal Central Nursing	
Matrons .. .. .	3	School . . . . .	1
Assistant Matrons ..	2	Tutors .. . . .	6
Sister-in-charge .. .	4	Health Sisters .. .	11
		Hospital Sisters . .	47
		Total .. . . .	75

2. *Locally Trained Nurses*—

Employed in Hospitals (Fijians 131, Indians 11 (including 58 nurses in 17 Rural Hospitals) .. .. .	142
Employed in District Nursing (Fijians 126, Indians 5) .. .	131
Nurses qualified during the year .. . . .	48
Nurses discontinued employment .. . . .	71
Male Nurses .. . . .	18
Post-Graduate (6 months) .. . . .	3

3. *Student Nurses in Training 31st December, 1954*—

Central Nursing School, Suva—

Fijians .. . . .	107
Rotumans . . . . .	4
Nauruans .. . . .	2
New Guinea .. . . .	1
Total .. . . .	114

Nursing School, Lautoka Hospital—

Fijians .. . . .	77
Indians .. . . .	5
Part-Europeans .. . . .	1
Total .. . . .	83

Labasa Hospital (only first year training given then transferred to Central Nursing School) .. . . .	8
Total .. . . .	205

Locally trained nurses at 17 Rural Hospitals .. . . .	58
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SUVA HEALTH OFFICE

Health Sisters, 2 (1 District, 1 School), Nurses = 10.

Clinic Attendances—

Europeans .. . . .	1,930
Part-Europeans .. . . .	935
Fijians .. . . .	12,519
Indians .. . . .	9,685
Chinese .. . . .	555
Others .. . . .	1,632
	27,256
Children under 2 years seen in Health Office . . . . .	5,864
„ „ Mobile Clinic . . . . .	8,219
Children vaccinated against Smallpox . . . . .	1,127
Inoculations against Diphtheria, Whooping Cough and Tetanus . . . . .	1,579
Cholera inoculations .. . . .	44
Inoculations against typhoid .. . . .	10,075
Homes visited .. . . .	3,972
Children inspected in schools .. . . .	9,749
treated for minor ailments .. . . .	8,892
referred to Dental Clinic .. . . .	117
Eye Clinic . . . . .	8
treated for Nutritional defect .. . . .	36
infected with Chicken-pox .. . . .	6
infected with Mumps .. . . .	5



## ACTIVITIES OF HEALTH SISTERS AND RURAL HEALTH NURSES BASED ON CENTRES OUTSIDE SUVA

	Lautoka	Labasa	Rewa	Ba	Tavua	Ra	Nadroga	Savusavu
Attendance at Health Clinic	2,220	11,301	1,674	1,515	638	2,024	1,137	2,378
Schools visited .. ..	53	40	56	29	27	50	55	15
Children examined at schools .. ..	7,068	3,210	13,120	3,852	6,594	3,117	5,986	1,230
Children seen in villages ..	3,617	1,164	11,829	3,600	2,756	2,071	6,772	1,203
Smallpox vaccination ..	604	358	357	67	119	180	729	34
Typhoid inoculation ..	7,862	3,909	5,739	3,321	3,749	4,127	1,175	296
Diphtheria, Whooping Cough and Tetanus injection .. ..	1,221	315	....	.. ..	....	1,799	75	19
Ante-natal examinations ..	250	29	1,883	71	115	508	878	337

## APPENDIX XVI

## CENTRAL MEDICAL RESEARCH LIBRARY

1. *Staff*—Salim Buksh, combined the duties of clerk and librarian.

Clerical work included the typing of catalogue cards for the material received, keeping personal cards of borrowers up-to-date, and filing letters, invoices, and bills in their appropriate files.

2. The following Medical Officers constitute the Library committee to consider and recommend books and other reading material for the Library.

Dr. Verrier .. .. .	Chairman
Dr. Gurd, Physician Specialist .. ..	Member
Mr. Cohen, Acting Surgeon Specialist . . . .	„
Dr. Edmonds, Acting Principal, Central Medical School .. .. .	„
Mr. Gilchrist, Lecturer in Anatomy and Surgery, Central Medical School .. .. .	„

3. During the year 284 volumes were acquired. Most of these were purchased through the Crown Agents, London. This brings the total to 2,851 volumes in the textbook section. Pamphlets and reprints received during the year from the Medical Department, were 24 now making a total of 382 pamphlets.

4. All material other than journals was classified and entered in catalogue cards, cards were arranged in alphabetical order and stored in cabinets. Each text book had catalogue cards made for author main entry, added entry and for all leading and main subjects. Books with hard covers were treated with book varnish, then clear varnish and placed on shelves according to their classification. Every book was marked on spine with “accession No.” and “location No.” Damaged books were repaired in the Library. A shelf catalogue card, was also provided for each textbook.

5. Duplicate issues of periodicals were circulated among various Medical Officers and some were distributed to Assistant Medical Practitioners' stations in districts and islands. Missing number of journals were received from the Librarian, London School of Hygiene and Tropical Medicine, American Armed Forces Library, Washington, and The Principal, Grant Medical College, Bombay India.

6. The students of the Central Medical School and the Assistant Medical Practitioners attached to the Colonial War Memorial Hospital had the full advantage of using the library freely throughout the year. Pupil nurses of the Central Nursing School formerly had the privilege of using and borrowing library books; however as books became damaged and lost, this privilege had to be discontinued.

7. Most textbooks and journals were borrowed by final year students. The average attendance of readers and borrowers were 40 daily including Medical Officers, Medical Students, Health Students, X-ray, Laboratory and Dental Students. About 80 textbooks were lent to the Central Medical School, for the use of students at Tamavua. A list of over-due books borrowed by students was prepared monthly and forwarded to the Principal. Date cards for over-due books were also put on the notice board for students' attention. Most of the books were recovered from students by the above method.

8. Bibliographical inquiries received from final year students, Assistant Medical Practitioners and Medical Officers were answered from the following journals: British Medical Journal, Nature, Lancet, Archives of Disease in Childhood, Journal of Bacteriology, Biochemical Journal, The Practitioner, The Journal of American Medical Association, British Journal of Radiology, Transactions of Royal Society of Tropical Medicine and Hygiene, The Journal of Nutrition, The Journal of Obstetrics and Gynaecology of the British Empire, Tropical Diseases Bulletin, British Journal of Venereal Diseases, British Medical Bulletin and from the British Encyclopaedia of Medical Practice.

APPENDIX XVII

Return of Diseases and Deaths for the year 1954, at the Colonial War Memorial Hospital, Tamavua, Lautoka, Labasa and Levuka Hospitals.

NOTE.—This classification is based on the International List of Causes of Death, 1929.

Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Deaths
I—INFECTIVE AND PARASITIC DISEASES									
A	1	001–008	Tuberculosis of respiratory system .. .. .	15	479	177	71	742	64
A	2	010	Tuberculosis of meninges and central nervous system ..	..	15	8	..	23	19
A	3	011	Tuberculosis of intestines, peritoneum and mesenteric glands ..	..	5	4	..	9	3
A	4	012, 013	Tuberculosis of bones and joints .. .. .	2	18	15	1	36	1
A	5	014–019	Tuberculosis, all other forms .. .. .	..	24	8	4	36	2
A	6	020	Congenital syphilis .. .. .	..	..	..	3	3	..
A	7	021	Early syphilis .. .. .	..	..	2	..	2	2
A	8	024	Tabes dorsalis .. .. .	..	..	..	..	..	..
A	9	025	General paralysis of insane .. .. .	..	..	..	..	..	..
A	10	022, 023 026–029	All other syphilis .. .. .	..	..	..	..	..	..
A	11	030–035	Gonococcal infections .. .. .	..	21	10	..	31	..
A	12	040	Typhoid fever .. .. .	..	2	2	..	4	..
A	13	041, 042	Paratyphoid fever and other Salmonella infections ..	..	2	..	..	2	..
A	14	043	Cholera .. .. .	..	..	..	..	..	..
A	15	044	Brucellosis (undulant fever) .. .. .	..	..	1	..	1	..
A	16	(a) 045	Bacillary dysentery .. .. .	3	2	8	..	13	..
		(b) 046	Amoebiasis .. .. .	6	16	15	..	37	8
		(c) 047, 048	Other unspecified forms of dysentery .. .. .	2	14	51	5	72	..
A	17	050	Scarlet fever .. .. .	..	..	..	..	..	..
A	18	051	Streptococcal sore throat .. .. .	1	1	..	..	2	..
A	19	052	Erysipelas .. .. .	2	..	..	..	2	..
A	20	053	Septicaemia and pyaemia .. .. .	..	..	..	..	..	..
A	21	055	Diphtheria .. .. .	1	..	3	..	4	1
A	22	056	Whooping cough .. .. .	1	5	13	1	20	1
A	23	057	Meningococcal infections .. .. .	..	6	5	4	15	5
A	24	058	Plague .. .. .	..	..	..	..	..	..
A	25	060	Leprosy .. .. .	1	2	4	..	7	..
A	26	061	Tetanus .. .. .	1	8	25	2	36	23
A	27	062	Anthrax .. .. .	..	..	..	..	..	..
A	28	080	Acute poliomyelitis .. .. .	..	..	..	..	..	..
A	29	082	Acute infectious encephalitis .. .. .	..	..	1	..	1	..
A	30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis .. .. .	..	1	..	..	1	..
A	31	084	Smallpox .. .. .	..	..	..	..	..	..
A	32	085	Measles .. .. .	..	1	..	1	2	..
A	33	091	Yellow fever .. .. .	..	..	..	..	..	..
A	34	092	Infectious hepatitis .. .. .	5	17	24	3	51	3
A	35	094	Rabies .. .. .	..	..	..	..	..	..
A	36	(a) 100	Louse-borne epidemic typhus .. .. .	..	..	..	..	..	..
		(b) 101	Flea-borne endemic typhus (murine) .. .. .	..	..	..	..	..	..
		(c) 104	Tick-borne epidemic typhus .. .. .	..	..	..	..	..	..
		(d) 105	Mite-borne typhus .. .. .	..	..	..	..	..	..
		(e) 102, 103 106–108	Other and unspecified typhus .. .. .	..	..	..	..	..	..
A	37	(a) 110	Vivax malaria (benign, tertian) * .. .. .	1	16	1	..	18	..
		(b) 111	Malariae malaria (quartan) .. .. .	..	..	..	..	..	..
		(c) 112	Falciparum malaria (malignant tertian) .. .. .	..	..	..	..	..	..
		(d) 115	Blackwater fever .. .. .	..	..	..	..	..	..
		(e) 113, 114 116, 117	Other and unspecified forms of malaria .. .. .	..	..	..	..	..	..
A	38	(a) 123-0	Schistosomiasis vesical ( <i>S. haematobium</i> ) .. .. .	..	..	..	..	..	..
		(b) 123-1	Schistosomiasis intestinal ( <i>S. Mansoni</i> ) .. .. .	..	..	..	..	..	..
		(c) 123-2	Schistosomiasis pulmonary ( <i>S. japonicum</i> ) .. .. .	..	..	..	..	..	..
		(d) 123-3	Other and unspecified schistosomiasis .. .. .	..	..	..	..	..	..
A	39	125	Hydatid disease .. .. .	..	..	..	..	..	..
A	40	(a) 127	Onchocerciasis .. .. .	..	..	..	..	..	..
		(b) ..	Loiasis .. .. .	..	..	..	..	..	..
		(c) ..	Filariasis bancrofti) .. .. .	4	53	9	1	67	..
		(d) ..	Other filariasis .. .. .	..	..	..	..	..	..
A	41	129	Ankylostomiasis .. .. .	1	38	102	2	143	..
A	42	(a) 126	Tapeworm (infestation) and other cestode infestations ..	..	..	..	..	..	..
		(b) 130-0	Ascariasis .. .. .	1	15	12	1	29	..
		(c) 130-3	Guinea worm ( <i>dracunculosis</i> ) .. .. .	..	..	..	..	..	..
		(d) 124, 128 130-1, 130-2	Other disease due to helminths .. .. .	..	1	..	..	1	..
A	43	(a) 037	Lymphogranuloma venereum .. .. .	..	..	..	..	..	..
		(b) 038	Granuloma inguinale, venereal .. .. .	..	..	..	..	..	..
		(c) 039	Other and unspecified venereal diseases .. .. .	..	8	2	1	11	..
		(d) 049	Food poisoning infection and intoxication .. .. .	1	4	4	4	13	1
		(e) 071	Relapsing fever .. .. .	..	..	..	..	..	..

\* Imported



Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Dtaths
(f)	072	Leptospirosis icterohaemorrhagica (Weil's disease) ..	..	..	..	..	..	..
(g)	073	Yaws .. .. .	..	35	12	..	47	..
(h)	087	Chickenpox .. .. .	..	1	3	..	4	..
(i)	090	Dengue .. .. .	1	..	..	..	1	..
(j)	095	Trachoma .. .. .	..	..	..	..	..	..
(k)	096.7	Sandfly fever .. .. .	..	..	..	..	..	..
(l)	120	Leishmaniasis .. .. .	..	..	..	..	..	..
(m)	121 (a)	Trypanosomiasis gambiensis .. .. .	..	..	..	..	..	..
	(b)	Trypanosomiasis rhodesiensis .. .. .	..	..	..	..	..	..
	(c)	Other and unspecified Trypanosomiasis .. .. .	..	..	..	..	..	..
(n)	131	Dermatophytosis .. .. .	..	..	1	1	2	..
(o)	135	Scabies .. .. .	1	16	6	1	24	..
(p)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096.1-096.6, 096.8, 096.9, 122, 132-134, 136-138	All other diseases classified as infective and parasitic ..	1	8	8	2	19	1
II—NEOPLASMS.								
A 44	140-148	Malignant neoplasm of buccal cavity and pharynx ..	..	3	3	1	7	2
A 45	150	Malignant neoplasms of oesophagus .. .. .	1	..	1	1	3	1
A 46	151	Malignant neoplasm of stomach .. .. .	..	4	7	2	13	4
A 47	152, 153	Malignant neoplasm of intestine, except rectum ..	1	3	9	1	14	2
A 48	154	Malignant neoplasm of rectum .. .. .	1	..	2	2	5	1
A 49	161	Malignant neoplasm of larynx .. .. .	2	..	2	..	4	..
A 50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary .. .. .	..	..	2	..	2	..
A 51	170	Malignant neoplasm of breast .. .. .	2	3	4	1	10	1
A 52	171	Malignant neoplasm of cervix uteri .. .. .	..	8	5	..	13	2
A 53	172-174	Malignant neoplasm of other and unspecified parts of uterus	4	5	3	..	12	2
A 54	177	Malignant neoplasm of prostate .. .. .	1	2	2	2	7	1
A 55	190, 191	Malignant neoplasm of skin .. .. .	7	2	..	4	13	1
A 56	196, 197	Malignant neoplasm of bone and connective tissue ..	1	8	..	1	10	2
A 57	155, 160, 164, 165, 175, 176, 178-181, 192- 195, 198, 199	Other and unspecified sites .. .. .	5	6	10	3	24	10
A 58	204	Leukaemia and aleukaemia .. .. .	1	..	5	..	6	5
A 59	200-203	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system .. .. .	..	4	3	..	7	1
A 60	210-239	Benign neoplasms and neoplasms of unspecified nature ..	7	26	32	5	70	..
III—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES.								
IV—DISEASES OF THE BLOOD AND BLOOD- FORMING ORGANS.								
A 61	250, 251	Nontoxic goitre .. .. .	..	4	8	..	12	..
A 62	252	Thyrototoxicosis with or without goitre .. .. .	1	7	4	..	12	..
A 63	260	Diabetes mellitus .. .. .	4	10	84	2	100	10
A 64 (a)	280	Beriberi .. .. .	..	..	2	..	2	..
(b)	281	Pellagra .. .. .	..	2	2	..	4	..
(c)	282	Scurvy .. .. .	..	..	..	..	..	..
(d)	283-286	Other deficiency states .. .. .	..	29	16	2	47	3
A 65 (a)	290	Pernicious and other hyperchromic anaemias ..	2	..	26	..	28	4
(b)	291	Iron deficiency anaemias (hypochromic) .. .. .	5	11	62	1	79	1
(c)	292, 293	Other specified and unspecified anaemias .. .. .	..	6	77	..	83	3
A 66 (a)	241	Asthma .. .. .	8	22	99	3	132	2
(b)	240, 242-245, 253, 254, 270- 277, 287-289, 294-299	All other allergic disorders endocrine, metabolic and blood diseases .. .. .	3	8	47	3	61	2
V—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.								
A 67	300-309	Psychoses .. .. .	5	7	18	1	31	..
A 68	310-324, 326	Psychoneuroses and disorders of personality ..	9	13	31	4	57	..
A 69	325	Mental deficiency .. .. .	1	..	5	..	6	..

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths	
VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.									
A 70	330-334	Vascular lesions affecting central nervous system .. ..	14	8	26	4	52	19	
A 71	340	Nonmeningococcal meningitis .. ..	1	6	12	1	20	10	
A 72	345	Multiple sclerosis . . . . .	..	..	..	..	..	..	
A 73	353	Epilepsy .. ..	3	4	11	..	18	3	
A 74	370-379	Inflammatory diseases of eye .. ..	2	39	37	3	81	..	
A 75	385	Cataract .. ..	1	16	64	7	88	..	
A 76	387	Glaucoma . . . . .	2	3	7	..	12	..	
A 77 (a)	390	Otitis externa .. ..	..	4	3	..	7	..	
(b)	391-393	Otitis media and mastoiditis .. ..	6	18	33	..	57	1	
(c)	394	Other inflammatory diseases of ear .. ..	..	31	5	1	37	..	
A 78 (a)	380-384, 386, 388, 389	} All other diseases and conditions of eye .. ..	8	28	34	14	84	..	
(b)	341, 344, 350-352, 360-369, 395-398		} All other diseases of the nervous system and sense organs ..	11	39	61	8	119	2
VII—DISEASES OF THE CIRCULATORY SYSTEM.									
A 79	400-402	Rheumatic fever .. ..		1	13	59	5	78	..
A 80	410-416	Chronic rheumatic heart disease .. ..	1	5	43	..	49	9	
A 81	420-422	Arteriosclerotic and degenerative heart disease .. ..	8	2	47	..	57	35	
A 82	430-434	Other diseases of heart .. ..	8	16	90	3	117	10	
A 83	440-443	Hypertension with heart disease .. ..	8	15	33	7	63	7	
A 84	444-447	Hypertension without mention of heart .. ..	5	4	16	1	26	10	
A 85	450-456	Disease of arteries .. ..	2	5	5	..	12	2	
A 86	460-468	Other diseases of circulatory system .. ..	15	19	66	5	105	7	
VIII—DISEASES OF THE RESPIRATORY SYSTEM.									
A 87	470-475	Acute upper respiratory infections .. ..	14	36	50	8	108	3	
A 88	480-483	Influenza .. ..	35	175	168	24	402	..	
A 89	490	Lobar pneumonia . . . . .	3	94	84	12	193	4	
A 90	491	Bronchopneumonia .. ..	7	95	106	7	215	37	
A 91	492, 493	Primary atypical, other and unspecified pneumonia.. ..	1	18	13	1	33	1	
A 92	500	Acute bronchitis .. ..	26	63	71	8	168	1	
A 93	501, 502	Bronchitis, chronic and unqualified .. ..	2	14	37	4	61	..	
A 94	510	Hypertrophy of tonsils and adenoids .. ..	4	6	13	1	24	..	
A 95	518, 521	Empyema and abscess of lung .. ..	..	5	6	..	11	..	
A 96	519	Pleurisy .. ..	..	12	13	..	25	1	
A 97 (a)	523	Pneumoconiosis .. ..	..	..	..	..	..	..	
(b)	511-517, 520-522, 524-527	} All other respiratory diseases .. ..	7	19	26	3	55	..	
IX—DISEASES OF THE DIGESTIVE SYSTEM.									
A 98 (a)	530	Dental Caries .. ..	..	4	5	3	12	..	
(b)	531-535	All other diseases of teeth and supporting structures ..	1	18	27	17	63	..	
A 99	540	Ulcer of stomach . . . . .	6	4	18	..	28	3	
A 100	541	Ulcer of duodenum .. ..	4	6	22	2	34	6	
A 101	543	Gastritis and duodenitis.. ..	10	24	68	4	106	..	
A 102	550-553	Appendicitis .. ..	26	30	131	16	203	2	
A 103	560, 561, 570	Intestinal obstruction and hernia .. ..	17	35	38	7	97	5	
A 104 (a)	571-0	Gastro-enteritis and colitis between 4 weeks and 2 years ..	4	35	49	5	93	15	
(b)	571-1	Gastro-enteritis and colitis, ages 2 years and over .. ..	15	56	120	8	199	2	
(c)	572	Chronic enteritis and ulcerative colitis . . . . .	3	5	5	..	13	1	
A 105	581	Cirrhosis of liver .. ..	2	5	9	..	16	6	
A 106	584, 585	Cholelithiasis and cholecystitis . . . . .	6	2	19	..	27	1	
A 107	536-539	} Other diseases of digestive system .. ..	28	38	84	8	158	9	
	542, 544, 545, 573-580, 582, 583, 586, 587								



Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths							
X—DISEASES OF THE GENITO-URINARY SYSTEM.															
A 108	590	Acute nephritis .. .. .	..	5	24	..	29	3							
A 109	591-594	Chronic, other and unspecified nephritis .. .. .	1	12	35	..	48	7							
A 110	600	Infections of kidney .. .. .	11	54	102	4	171	3							
A 111	602, 604	Calculi of urinary system .. .. .	9	2	37	7	55	1							
A 112	610	Hyperplasia of prostate . .. .	3	5	23	1	32	2							
A 113	620, 621	Diseases of breast . .. .	7	10	16	..	33	1							
A 114 (a)	613	Hydrocele . .. .	5	29	15	1	50	..							
(b)	634	Disorders of menstruation .. .. .	22	30	61	5	118	..							
(c)	601, 603 605-609 611, 612 614-617 622-633 635-637	} All other diseases of the genito-urinary system .. ..	34	116	179	9	338	15							
XI—DELIVERIES AND COMPLICATIONS OF PREG- NANCY, CHILDBIRTH AND THE PUERPERIUM.															
A 115	640-641, 681, 682, 684								Sepsis of pregnancy, childbirth and the puerperium .. ..	..	10	26	1	37	..
A 116	642, 652, 685, 686								Toxaemias of pregnancy and the puerperium . .. .	5	7	69	1	82	5
A 117	643, 644 670-672								Haemorrhage of pregnancy and childbirth .. .. .	4	14	40	11	69	4
A 118	650								Abortion without mention of sepsis or toxaemia .. ..	14	36	83	19	152	..
A 119	651	Abortion with sepsis .. .. .	3	3	16	4	26	..							
A 120 (a)	645-649 673-680	} Other complications of pregnancy, childbirth and the puerperium .. .. .	30	76	320	14	440	7							
(b)	683, 687-689 660								Delivery without complications . .. .	46	172	469	29	716	..
XII—DISEASES OF THE SKIN AND CELLULAR TISSUE.															
XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.															
A 121	690-698	Infections of skin and subcutaneous tissue .. .. .	60	244	249	35	588	..							
A 122	720-725	Arthritis and spondylitis . .. .	8	43	68	10	129	1							
A 123	726, 727	Muscular rheumatism and rheumatism unspecified .. ..	5	10	32	..	47	..							
A 124	730	Osteomyelitis and periostitis .. .. .	2	44	24	1	71	..							
A 125	737, 745-749	Ankylosis and acquired musculo-skeletal deformities ..	1	3	6	1	11	..							
A 126 (a)	715	Chronic Ulcer of Skin (including tropical ulcer) .. ..	19	21	19	6	65	1							
(b)	700-714, 716	All other diseases of skin .. .. .	10	23	26	4	63	..							
(c)	731-736, 738-744	} All other diseases of musculo-skeletal system .. ..	9	28	25	3	65	1							
XIV—CONGENITAL MALFORMATIONS															
A 127	751	Spina bifida and meningocele .. .. .	..	1	1	..	2	1							
A 128	754	Congenital malformations of circulatory system .. ..	..	1	5	..	6	3							
A 129	750, 752, 753, 755-759	} All other congenital malformations .. .. .	3	20	37	4	64	1							
XV—CERTAIN DISEASES OF EARLY INFANCY.															
A 130	760, 761	Birth injuries .. .. .	..	3	..	..	3	1							
A 131	762	Postnatal asphyxia and atelectasis .. .. .	..	1	2	..	3	2							
A 132 (a)	764	Diarrhoea of newborn (under 4 weeks) . .. .	..	1	4	..	5	1							
(b)	765	Ophthalmia neonatorum . .. .	..	..	..	..	..	..							
(c)	763, 766-768	Other Infections of newborn .. .. .	..	1	..	..	1	..							
A 133	770	Haemolytic disease of newborn . .. .	..	3	5	..	8	1							
A 134	769, 771, 772	All other defined diseases of early infancy .. .. .	..	5	11	1	17	6							
A 135	773, 776	Ill-defined diseases peculiar to early infancy, and immaturity unqualified .. .. .	..	2	22	1	25	20							

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Deaths
		XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.						
A 136	794	Senility without mention of psychosis.. ..	5	3	6	..	14	3
A 137 (a)	788-8	Pyrexia of unknown origin .. ..	4	50	33	8	95	3
(b)	793	Observation, without need for further medical care . ..	47	247	333	34	661	..
(c)	780-787	} All other ill-defined causes of morbidity .. ..	14	14	37	4	69	1
	788-1-788-7							
	788-9, 789-792, 795							
(d)		Born in Hospital.. ..	36	112	365	20	533	..

“ E ” CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE).

Intermediate List Number	Detailed List Numbers	Cause Groups.	Euro.	Fijian	Indian	Other	Totals	Deaths
AE 138	E810-E835	Motor vehicle accidents .. .. .	1	5	18	5	29	1
AE 139	E800-E802 E840-E866	} Other transport accidents .. .. .	..	4	2	..	6	1
AE 140	E870-E895	Accidental poisoning .. .. .	..	2	11	2	15	1
AE 141	E900-E904	Accidental falls .. .. .	5	12	21	..	38	..
AE 142	E912	Accident caused by machinery .. .. .	..	1	3	..	4	..
AE 143	E916	Accident caused by fire and explosion of combustible material	2	11	13	1	27	..
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation .. .. .	..	2	1	1	4	..
AE 145	E919	Accident caused by firearm .. .. .	..	3	2	..	5	..
AE 146	E929	Accidental drowning and submersion .. .. .	..	3	13	1	17	..
AE 147	(a) E920	Foreign body entering eye and adnexa .. .. .	1	1	4	..	6	..
	(b) E923	Foreign body entering other orifice .. .. .	..	1	2	1	4	..
	(c) E927	Accidents caused by bites and stings of venomous animals and insects .. .. .	..	2	1	..	3	..
	(d) E928	Other accidents caused by animals .. .. .	..	..	4	..	4	..
	(e) E910, E911 E913-E915 E921-E922 E924-E926 E930-E965	} All other accidental causes .. .. .	11	50	27	13	101	..
AE 148	E970-E979	Suicide and self-inflicted injury .. .. .	..	..	..	..	..	..
AE 149	E980-E985	Homicide and injury purposely inflicted by other persons (not in war) .. .. .	1	4	16	1	22	..
AE 150	E990-E999	Injury resulting from operations of war .. .. .	..	1	..	..	1	..

" N "—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY).

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
AN 138	N800-N804	Fracture of skull . . . . .	1	3	4	2	10	1
AN 139	N805-N809	Fracture of spine and trunk . . . . .	1	1	2	2	6	1
AN 140	N810-N829	Fracture of limbs . . . . .	4	19	20	7	50	..
AN 141	N830-N839	Dislocation without fracture . . . . .	1	6	5	1	13	..
AN 142	N840-N848	Sprains and strains of joints and adjacent muscle . . . . .	4	13	15	2	34	..
AN 143	N850-N856	Head injury (excluding fracture) . . . . .	1	6	5	2	14	..
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis . . . . .	1	4	5	1	11	..
AN 145	N870-N908	Laceration and open wounds . . . . .	1	10	19	..	30	..
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin surface . . . . .	4	11	8	1	24	..
AN 147	N930-N936	Effects of foreign body entering through orifice . . . . .	..	2	6	1	9	..
AN 148	N940-N949	Burns . . . . .	2	13	14	2	31	..
AN 149	N960-N979	Effects of poisons . . . . .	..	2	11	2	15	1
AN 150	N950-N959 N980-N999	} All other and unspecified effects of external causes . . . . .	1	12	24	2	39	..



## APPENDIX XVIII

URBAN/TOWNSHIP/RURAL SANITARY DISTRICTS OF FIJI.  
REPORT OF HEALTH INSPECTORS FOR THE YEAR 1954.

Type of Premises, etc.	Inspection	Re-inspec- tions	Total
House-to-house Inspection of District .. ..	37,270	5,446	42,716
Investigation of Complaints, Nuisances, etc. . .	1,296	575	1,871
New Building Sites—before approval . . . .	1,107	315	1,422
New buildings works in progress .. .. .	2,775	1,200	3,975
Investigation of infectious disease and disinfection..	459	123	582
Shipping .. .. .	246	40	286
Aircraft .. .. .	417	18	435
Houses-let-as-lodgings and lodging houses .. ..	590	241	831
Factories and Workshops .. .. .	358	146	504
Cemeteries .. .. .	219	74	293
Schools .. .. .	215	76	291
Checking sanitary services (A/Cs, etc.) .. ..	241	54	295
Laundries . . . . .	316	203	519
Hairdressers, Chiropodists, etc. .. .. .	692	371	1,063
Foodshops, foodstuffs, markets, etc. . . . .	3,698	1,706	5,404
Eating houses and ice cream premises .. .. .	334	716	2,050
Aerated water and ice factories .. .. .	321	187	508
Kava saloons .. .. .	131	79	210
Bakehouses .. .. .	454	261	715
Slaughterhouses . . . . .	154	118	272
Butchers shops .. .. .	143	31	174
Food vehicles .. .. .	357	193	550
Hawkers premises .. .. .	....	....	....
Shops other than food premises .. .. .	....	....	....
Dairies, hotel, boarding houses .. .. .	18	2	20
Inspection of gang work .. .. .	72	....	72
Sanitary survey of ships .. .. .	32	....	32
Miscellaneous .. .. .	229	164	393
Total .. .. .	53,144	12,339	65,483

## 2—WRITTEN NOTICES, ETC., ISSUED

Intimation Notices Served .. .. .	4,609
Statutory Notices Served .. .. .	414
Buildings Surveyed for Closure or Demolition ..	1,294
Closing Orders Served .. .. .	57
Demolition Orders Served .. .. .	42
Buildings Demolished after service of Orders—	
By Owners .. .. .	17
By Local Authority .. .. .	16

## 3—BUILDING APPLICATIONS DEALT WITH

	Number	Value
Applications in respect of New Buildings ..	1,151	£1,797,455
Applications in respect of Alterations and Repairs	525	81,905
Applications in respect of Septic Tanks . .	51	4,230
Total .. .. .	1,727	£1,883,590
Buildings Completed and Passed during year ..		748
Applications Outstanding in Register (work not completed) at end of year—		
New Buildings . . . . .		1,553
Alterations and Repairs .. .. .		120
Septic Tankss . . . . .		37

4—SUMMARY OF SANITARY IMPROVEMENTS, ETC. (ALL TYPES OF PREMISES)

Items	Ordered	Completed *
Repairing of Buildings .. .. .	314	221
Improvements to Lighting and Ventilation of Buildings .	280	218
Removal of Unauthorized Erections .. .. .	165	82
Abatement of Overcrowding .	222	117
New Privies (all types) .. .. .	1,868	1,343
Repairing, Cleansing or Flyproofing of Privies .. .. .	3,227	3,053
Filling in of Insanitary Privies .. .. .	1,230	1,022
New Bathrooms or Washing Places .	293	213
Repairing or Cleansing of Bathrooms or Washing Places .. .. .	893	786
New Kitchens .	209	150
Repairing or Cleansing of Kitchens .	624	537
Provision of New Drains .. .. .	825	609
Repairing or Cleansing of existing Drains .	1,897	1,582
New Wells .. .. .	249	1,773
Repairing or Improvement of Wells .. .. .	612	436
New Water Tanks .. .. .	45	32
Repairing, Screening or Cleansing of Water Tanks .. .. .	294	253
Removal of Accumulations of Refuse, etc. .	4,288	3,410
Clearing of Overgrowth or Long Grass .. .. .	4,452	3,188
Provision of Garbage Tins .. .. .	1,291	905
Abatement of Nuisances from Animals or Poultry .. .. .	1,544	712
Abatement of Mosquito Breeding .. .. .	2,062	1,850
Cleansing of Food Premises .. .. .	1,280	1,100
Structural Improvements to Food Premises .. .. .	293	215
Cleansing of Food Vehicles .. .. .	183	179
Improvements to Food Vehicles .. .. .	83	67
Cleansing or Improvement of Hairdressers Premises .. .. .	343	277
Cleansing or Improvement of Laundries .. .. .	166	144
Cleansing or Improvement of Schools .. .. .	47	32
Cleansing or Improvement of Shipping .. .. .	81	79
Impounding of Straying Cattle .. .. .	27	24
Removal of Tins and Bottles .. .. .	3	3
Miscellaneous .. .. .	74	74
Total .. .. .	29,464	23,090

\* This column may include work completed during the month under review but ordered during previous months.

5—MOSQUITO CONTROL

Premises Inspected for Mosquito Larvae .. ..	1,009,481
Premises at which larvae found .. ..	2,167
Larval Index .. ..	21 per cent

6—DISINFECTION, DISINFESTATION AND FUMIGATION

Type of premises or vessels	Method	Number
Overseas Vessel .. ..	H.C.N. .. ..	15
Local Vessel .. ..	Aerosol Bomb .. ..	24
Local Vessel .. ..	H.C.N. .. ..	92
Dwellings .. ..	Formalin Cyllin and Zaldicide .. ..	7
.. ..	.. ..	103
.. ..	D.D.T. .. ..	21
Aircraft .. ..	Aerosol Bomb .. ..	373
International Deratization Certificates Issued .. ..	.. ..	15
International Deratization Exemption Certificates Issued .. ..	.. ..	Nil



7—ANTI-RAT MEASURES

Traps Set	..	..	..	..	..	..	..	12,640
					Rattus Rattus	Rattus Norvegicus	Total	
Rats Destroyed by Trapping	..				700	1,192	1,892	
Rats Destroyed by Fumigation—								
Overseas Shipping	..	..	..	..	4	2	6	
Local Shipping	..	..	..	..	77	..	77	
Aircraft (give details)	..	..	..	..	..	..	..	
Rats submitted for Laboratory								
Examination	..	..	..	..	..	..	78	
Rats found infected	..	..	..	..	..	..	..	

8—SUPERVISION OF LABOUR GANGS, ETC.

Number of men employed, Clearing and Draining Work done, Loads of Refuse removed, etc—					
Number of men employed	..	..	..	..	827 men
Clearing and Draining work done	..	..	..	..	1,500 acres
Loads of refuse removed	..	..	..	..	9,434 loads
Latrine pans dealt with	..	..	..	..	34,025

9—FOOD INSPECTION AND SAMPLING

Unsound Foodstuffs Condemned and Destroyed—27,696 pounds (general).

Food and Water Samples taken—					
Milk—Genuine	..	..	160	Fresh water (Bact.)	.. 179
Non Genuine	..	..	16	Aerated water	.. 4
Ice cream—Genuine	..	..	67	Water (chemical)	.. ..
Non Genuine			13		

10—LEGAL PROCEEDINGS

Defendants, Offences and Results of Action—

<i>Public Health Ordinance</i>				<i>Pure Food Ordinance</i>			
Cases	..	..	225	Cases	..	..	42
Convictions	..	..	203	Convictions	..	..	41
Penalties	..	..	£370 8s.	Penalties	..	..	£366

11—REMARKS AND DETAILS OF ANY OTHER SPECIAL WORKS CARRIED OUT DURING THE MONTH UNDER REVIEW

<i>Sanitation Campaign</i>					
Squatting Slabs sold	..	..	..	..	452
Pedestal Slabs Sold	..	..	..	..	93

## APPENDIX XIX

## INTERNATIONAL AIRPORT—NADI

1. Dr. L. Hatcher was transferred to Nadi Airport on June 1st to replace Dr. D. Keating-Clay. Nursing Sister Cain proceeded on Overseas leave on December 31st and was replaced by Sister McEwan.

2. Patients passing through Nadi Airport—

- (1) One case of severe dysentery travelling between Canton Island and Auckland was off loaded and sent to Lautoka Hospital.
- (2) One Fijian child with Congenital Heart Disease was sent from Fiji to Auckland.
- (3) One child with Rheumatic Heart Disease passed through Nadi Airport in transit between the Cook Islands and New Zealand.
- (4) Two passengers who were suspect smallpox contacts landed from Canton Island. The necessary precautions were taken and the passengers put under surveillance and they continued their journey to Suva.

3. Vaccinations, inoculations and other work performed in 1954.

	European	Fijian and others	Total
Smallpox—Airport personnel ..	152	459	667
Passengers arriving from overseas .. ..	56	..	..
T.A.B. .. .. .	15	..	15
A.T.S. .. .. .	44	78	122
Diphtheria and Pertussis .. ..	39	..	39
Ante-Natal patients seen .. ..	60	..	60
Infant Welfare . .. .	237	..	237
Minor operations .. .. .	35	..	35

Medical Examinations for Extension of Tour for Civil Aeronautics Board—18 of which include eight officers.

4. A Medical and Dental building is being built at the airport by the South Pacific Air Transport Council for the use of Europeans. Its completion has been delayed because of the shortage of building material. The Dental Officer will be supplied by New Zealand.

## AIRCRAFT CRASH PRECAUTIONS

5. In August 1954 new Crash Orders were outlined by a committee of the Airport Manager, Chief Clerk, Regional Traffic, Representative of each Airline, Medical Officer, Police Inspector and Firemaster. The object of this was to make use of more people if a crash occurred. A member of the Customs Department was appointed as the Co-ordinating Officer. Certain officers were appointed to assist in setting up the Casualty Clearing Station. It was decided to use one of the store rooms as a mortuary, this building had been the cold room. A crash practice was held which was very satisfactory and as a result of it no changes will be made in the crash procedure.

6. Some alterations were made to the Casualty Clearing Station.. A telephone was installed which is on the same line as the Dispensary. Alterations were made so that the toilets and bathrooms could be reached only from the main room. Yale locks were put on the doors and a master key is kept in a glass cupboard in the Customs Office. Extra mattresses and linen have been supplied by the Civil Aeronautics Board.

7. There are eight ex-nurses who have volunteered to help in the Casualty Clearing Station. A course of six lectures was given to them by the Medical Officer on the treatment of injuries. The Neilson method of resuscitation has been adopted instead of the Schafer method.

THE FOLLOWING TABLE INDICATES THE NUMBER OF PATIENTS SEEN IN THE NADI AIRPORT DISPENSARY—1954.

Month	Civil Air Board	Fiji Government	European Employees					Patients in Homes	Others Patients	Total	Fijian and Others
			P.A.A.	C.P.A.	B.C.P.A.	QANTAS	TEAL.				
January .. ..	202	12	25	....	28	....	....	11	15	293	549
February .. .	211	2	37	2	31	....	....	29	7	301	691
March .. .. .	178	6	13	....	14	....	....	9	8	228	743
April .. .. .	144	5	28	2	17	....	....	10	16	222	466
May .. .. .	147	....	16	1	....	16	....	11	20	211	659
June .. .. .	154	10	38	4	....	16	5	12	12	251	546
July .. .. .	165	30	58	3	....	20	6	14	3	299	652
August .. ..	182	17	51	....	....	29	17	28	8	332	573
September ..	182	24	20	....	....	26	7	22	9	290	552
October .. ..	147	15	26	2	....	25	3	13	4	238	661
November .. .	174	16	17	1	....	34	3	5	9	259	775
December .. .	198	16	25	....	....	57	3	9	28	336	700
Total .. ..	2,084	153	354	15	90	223	44	173	139	3,260	7,567

" Other Patients " include passengers and visitors to the base.



APPENDIX XX

The following meteorological reports for the year 1954 have been supplied by the Meteorological Office.

METEOROLOGICAL REPORTS FOR 1954.

LAUCALA BAY					1954	SUVA					1954
Rainfall—						Rainfall—					
Total .. .. .					149.39"	Total .. .. .					167.70"
Departure from normal—						Normal for 63/64.. .. .					123.43"
Wet days (0.01" or more) .. ..					267	Departure from normal .. .. .					+44.27"
Wettest day—						Wet days (0.01" or more). .. ..					216
Jan. 15th .. .. .					4.53"	Wettest day on—					
						23rd Aug. .. .. .					5.50"
Temperatures—						Temperatures—					
Mean Maximum .. .. .					82.4°F.	Mean Maximum .. .. .					83.2°F.
Highest recorded . . . . .					90.9°F. on Dec. 22	Highest recorded .. .. .					94.5°F. on Dec. 26
Mean Minimum .. .. .					72.3°F.	Mean Minimum .. .. .					72.5°F.
Lowest Minimum .. .. .					62.6°F. on Aug. 23	Lowest Minimum .. .. .					62.5°F. on Aug. 28
Mean Temperature $\frac{1}{2}$ (Max + Min) ..					77.4°F.	Mean Temperature $\frac{1}{2}$ (Max + Min) ..					77.8°F.
Mean Temperature at 9 a.m. .. ..					78.3°F.	Departure from normal .. .. .					+0.7°F.
Humidity—						Mean Temperature at 9 a.m. .. ..					78.9°F.
Mean Humidity at 9 a.m. .. ..					83.9 %	Humidity—					
Bright Sunshine—						Mean Humidity 9 a.m. .. .. .					80.7 %
Total hours .. .. .					1689.3						
Mean Daily .. .. .					4.6 hrs.						

NOTES

The year 1954, which had an excess rainfall of 44.27 ins. was the 5th wettest recorded in Suva. Previous records being as follows:—

1949 .. .. .	220.54 ins.	1906 .. .. .	169.62 ins.
1921 .. .. .	170.74 ins.	1924 .. .. .	168.80 ins.

Most months generally regarded as “ dry ” were very wet during 1954. The total rainfall for the period from May to October was 71.46 ins., compared with an average of 48.60 ins. for the period.

On the whole the year was rather warm, particularly September and December which had mean temperatures of just over 2.0°F. above normal. The highest temperature 94.5°F. on December 26 was the highest since January 14th 1949 when it reached 94.9°F.

The prevailing wind direction was East, with a mean speed of 7.5 knots, and the highest gust recorded was 46 knots from ENE. on January 15th. On January 14th and 15th, the only tropical storm to threaten the Group approached from NE. and passed a short distance north of the main islands, and continued SSW. to SW. beyond the Yasawas.







